

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

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

TENDER SPECIFICATIONS TR-21/02

(VOLUME – I OF III)

CONSTRUCTION OF 400/220 KV SUB-STATIONS AT DHARDEHI (BILASPUR) (DIST: MUNGELI) (Upgradation of existing 220/132 KV S/s Dhardehi) ON TURNKEY BASIS (Through E-Bidding)

RFx No. 8100022809

DATE & TIME OF PRE BID CONFERENCE DATE: 24/12/2021 (TIME 11:30 HRS)

LAST DATE & TIME OF SUBMISSION OF TENDER DATE: 07/01/2022 (TIME 14.00 HRS)

DUE DATE & TIME OF OPENING OF TENDER DATE: 07/01/2022 (TIME 14.10 HRS)

Cost of Tender Document: Rs.11,800

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

CONSTRUCTION OF 400/220KV SUB-STATION AT DHARDEHI (BILASPUR) ON TURNKEY BASIS

INDEX

Volume-I				
Tender Form Notice Inviting Tender (N.I.T.) General Description of Project & Scope of work Special Instructions to bidders for submission of bid through SAP- SRM module (E-bidding) Instruction to bidders (Earnest Money Deposit and Pre-Qualification Requirements, Price bid and its evalution,		5-32		
SECTION-II	dates & duties etc.) General condition of contract for EHV Sub-stations.	33-53		
SECTION-III	Price Bid Annexures for sub-station , Annexure B-1 to B-11, C-1, D-1 & D-2,	54-95		
SECTION- IV	Annexures, schedules and formats	96-139		
SECTION- V	List of vendor	140-152		
	Volume -II			
SECTION-I	Technical Specification for construction of 400/220 KV S/S	1-381		
SECTION-II	Price variation Formulae for EHV Substation equipments	382-399		
	Volume -III			
SECTION-I	Drawings for EHV Sub-station			
SECTION-II	Civil foundation drawings for EHV Sub-station			

VOLUME - I INDEX

S.No.	PARTICULARS	Page No.
1	Tender Form	5
2	Notice Inviting Tender (N.I.T.)	6-7
3	General Description of Project & Scope of work	8-14
	SECTION- I	
1	Special Instructions to bidders for submission of bid through SAP-SRM module (E-bidding).	15-16
2	Instruction to bidders	17-18
3	Earnest Money Deposit	18
4	Pre-Qualification Requirements	19-23
5	Other Eligibility Criteria or qualifying requirement	22-26
6	Price-bid & its evaluation	27-30
7	Taxes	30-31
8	Pre Bid Conference	31
	SECTION-II	22.24
TT	General Condition of Contract	33-34
II	General Condition of Contract for EHV substation	34-53
	SECTION-III	
	(PRICE BID ANNEXURES)	54
	Abstract of Price Bid Annexures (Grand Summary)	55
B-1	400 KV side switchyard & control room Equipment	56-57
B-2	220 KV side switchyard & control room Equipment	58-59
B-3	33 KV side switchyard & control room Equipment	60
B-4	Conductor, Clamps, Connectors, Disc Insulators & Hard ware	61-62
B-5	Cable, DG set, Battery set & Battery Charger	63-64
В-6	Luminaires, fire fighting & Miscellaneous Equipments	65-68
B-7	G. I. Steel Structure	69-70
B-8	T & P and other Instruments	71-75
B-9	Furniture for control room	76
B-10	Sub-station Automation System	77-78
B-11	Mandatory spares	79-80
C-1	Civil Works	81-88
D-1	Erection Charges	89-93
D-2	Testing & Commissioning Charges	94-95
	SECTION- IV	96
	Abstract of Annexures, Schedules & Formats	97-139
A-1	General Information to be furnished by bidder	97

S.No.	PARTICULARS	Page No.
A-2	Declaration Form	98
A-3	Questionnaire	99-102
A-4	Undertaking of having Personal Capabilities	103
A-5	Undertaking of having Equipment Capabilities for sub-station	104
A-6	Financial Capability	105
A-7	Format for evidence of access to or availability of credit/facilities	106
A-8	Experience Record	107
A-9	Deviation from Technical Specification/Condition	108
A-10	Deviation from the Condition of Contract (Commercial)	109
A-11	Completion schedule for sub-station	110
A-12	Litigation History of the bidder	111
A-13	Cash Flow Requirement	112
A-14	Agreement (Proforma)	113-114
A-15	Proforma for Bank Guarantee towards Security Deposit	115
A-16	Proforma for Bank Guarantee towards performance	116
A-17	Proforma for Bank Guarantee for Loss/Damages to CSPTCL	117-118
A-18	Proforma for Indemnity Bond	119-120
A-19	Proforma for Deed of Extension of Bank Guarantee	121
A-20	Proforma for undertaking by the Joint Venture Partners	122-124
A-21	Proforma for Power of attorney for joint venture	125-126
A-22	Pre-Contract Intergrity Pact	127-131
A-23	Inspection Plan for substation equipment	132-133
A-24	Illustrative Example for Capitalistion of Losses	134
A-25	Check list	135-136
A-26	Certificate issued by Chartered Accountant	137
A-27	Declaration by the bidder	138
A-28	Certification by the Bidder as per order No. F.No.6/18/2019-PPD dated 23/07/2020 read with amended order No.18/37/2020-PPD Dtd.08.02.2021 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India (DoE Order)	139
SECTI ON- V	LIST OF VENDORS	140-152

CHHATTISGARH STATE POWER TRANSMISSION CO. LTD



Tender document SL No.

(A Government of Chhattisgarh Undertaking)

O/o Executive Director (Planning & Project)

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

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

TENDER FORM

TENDER SPECIFICATION TR-21/02 FOR CONSTRUCTION OF 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR) ON TURNKEY BASIS

Tollact door	**************************************
Issued to M	/s*
Cost of Ten	der documents Rs
D.D.No	Dtd
Name of Ba	ınk
* Not requi	red in case tender document is downloaded
	Signature & Seal of Issuing Authority CSPTCL; Raipur
State Power do the sever specification supplied, exeperform and	gned hereby tender and offer (subject to CSPTCL's conditions of tendering), the Chhattisgarh Transmission Company to test and supply, plant, machinery, materials, deliver and execute and all works and things which are described or referred to in the enclosures & Annexures to the TR-21/02 copies of which are annexed hereto and which under the terms thereof are to be ecuted and done by the contractor in a thoroughly good and workman like manner, and to observe the provisions and agreements or the part of the contract contained in or reasonably to from the said tender documents for the sum and at the rates set out in schedules annexed hereto.
It is conf	firmed that:
(I)	Questionnaire for Commercial terms and conditions.
(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.

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

 Website: www.cspc.co.in
 Phone: 0771-2574209/14/41

 email: cepnp.csptcl@cspc.co.in
 Fax: 0771-2574246

No.02-04/NIT/TR-21/02/ 1682

Raipur/dtd.03.12.2021

E-NOTICE INVITING TENDER

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

S. No.	Tender No.	Particulars	Cost of Tender Docum ents (Non- refund able)	Earnest money	Due date of opening	Date of Pre bid conference
1.	TR- 21/02 RFx No 81000 22809	Construction of 400/220 KV sub-station at DHARDEHI (Bilaspur) (Distt.Mungeli) (upgradation of existing 220/132 KV S/s, Dhardehi) comprising of 2 No. three phase,315 MVA 400/220/33 KV auto transformer & 2 Nos. 400KV 50 MVAR shunt reactor, 02 numbers 400 KV transformer bay, 04 numbers 400 KV feeder bay & 02 number 400 KV tie breaker bay, 02 numbers 220 KV feeder bays, 01 number 220KV bus tie, 02 numbers 220 KV incomer bays of 400/220/33KV Auto transformer, IEC 61850 based substation automation system to be integrated with existing bays of 220/132 S/s Dhardehi and new proposed bays of 400/220 S/s Dhardehi in new control room building of 400/220 KV S/s including hardware and software(for control and supervision from local substation as well as remote station), alongwith associated equipments & other works on turnkey basis as per tender document.	Rs.11, 800/- (inclu ding 18 % GST)	Rs. 5.00 lacs	07/01/2022	24/12/2021 At 11.30 Hrs

SCOPE OF WORK:

- (i) All civil works associated with construction of all 400/220 KV sub-stations viz construction of foundation, cable trench, control room building, bay marshalling room, external water supply arrangements & road etc. along with supply of cement, steel and other required material.
- (ii) All designing & drawing of sub-station, supply of all equipments including transformers, galvanized steel structures other materials & IEC 61850 based substation automation system to be integrated with existing bays of 220/132 S/s Dhardehi and new proposed bays of 400/220 S/s Dhardehi in new control room building of 400/220 KV S/s (including hardware and software for control and supervision at local substation as well as remote station) along with associated equipments conforming to relevant I.S./International Standards as approved by CSPTCL.
- (iii) Erection, Testing & commissioning of individual equipments and energization of complete substation and erection, testing & commissioning.
- (iv) Supply of testing equipments, T&P, furniture etc.

TR-21/02

NOTE:-

- i) Bidders are requested to participate in all the works included in the tender. Part bidding is not acceptable.
- ii) In case any of the above date is declared as holiday, then the particular date will automatically get shifted to next working day.
- iii) Any notice for extension of due date of tender opening shall not be published in newspapers. It will be displayed only on official website of the company.
- iv) The tender will be processed through e-bidding module of SAP-SRM. Bidders are advised to visit our website www.cspc.co.in/csptcl for viewing detailed instructions regarding submission of offer through SAP-SRM.
- v) Pre bid conference shall be held in the O/o ED/CE (P&P) SLDC building danganiya Raipur on dtd, 24/12/2021 at 11.30 Hrs.

TERMS AND CONDITIONS:-

- (i) The tender documents can be obtained from the office of the ED (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/ non-receipt of tender documents. No receipt of tender shall be issued in any case.
- (ii) The tender document can also be downloaded from official website of CSPTCL "www.cspc.co.in" (go through Chhattisgarh State Power Transmission Co. Ltd. Tender Notice) 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 14:00 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 14:00 Hrs. on the due date and shall be opened at 14:10 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 400/220KV SUB-STATION AT DHARDEHI (BILASPUR) (UPGRADATION OF EXISTING 220/132 KV S/S DHARDEHI)

The tentative scope of works are as under:

Project	Particulars Particulars	
1.	(1) Construction of 400/220 KV sub-station at DHARDEHI (Bilaspur)(Distt. Mungeli) (upgradation of existing 220/132 KV S/s) comprising 2 No. 400/220 KV, 315 MVA transformer & 2 Nos. 400KV 50 MVAR shunt reactor, 02 numbers 400 KV transformer bay, 04 numbers 400 KV feeder bay & 02 numbers 400 KV tie breaker bay, 02 numbers 220 KV feeder bays, 01 number 220KV bus tie, 02 numbers 220 KV incomer bays of 400/220/33KV Auto transformer, IEC 61850 based substation automation system to be integrated with existing bays of 220/132 S/s Dhardehi and new proposed bays of 400/220 S/s Dhardehi in new control room building of 400/220 KV S/s hardware and software (for control and supervision from local substation as well as remote station), alongwith associated equipments & other works on turnkey basis as per tender document.	

Bidders are requested to quote for all the above sub-station construction works. Part bidding is not accepted.

I. DESCRIPTION OF SUB-STATION WORKS:

The scope of this specification covers construction of 400/220 KV Substation at Dhardehi, Distt. Mungeli (Upgradation Of Existing 220/132 Kv S/S Dhardehi) on turn key basis with the provision of following bays as per Single line diagram/tentative switchyard layout.

- a) 400kV/220 kV/33 kV,315 MVA three phase Autotransformers along with Nitrogen fire prevention system and online DGAmonitoring system 02 Nos
- b) 50 MVAR shunt reactor on line along with 3 MVAR NGR 02 No
- c) 400 kV Diameters 04 Nos consisting of following
 - i) 400KV Feeder bays 4 nos
 - ii) 400 kV Transformer bays 2 nos
 - iii) 400 kV Tie bays 4 nos
- d) 220 kV bays for 400/220/33 kV, 315 MVA Auto transformers 02 Nos
- e) 220 kV bays for 220kV feeders 02 Nos
- f) 220kV Bus coupler bay 01 No
- h) 400KV Bus CVTs 02 sets
- i) 33 KV bays for station supply (two numbers for tertiary for 2 Nos Autotransformers)
- 1.2 The detailed scope of work is brought out in subsequent clauses of this section.
- 1. All civil works including design, drawing and construction of foundation, cable trench, control room building, bay marshalling room, external water supply arrangements & road etc along with supply of cement, steel and other required material.

- 2. All designing and drawing of Substation, supply of galvanised steel structure for equipments, gantry, bus-bar, high mast lighting arrangements.
- 3. Design of sub-stations and supply of 400/220 KV, 315 MVA auto transformer, all equipments for 400 KV, 220 KV and 33 KV switchyard and control room equipments, control cables etc.
- 4. Supply of testing equipments, IEC61850 based SCADA along with associated equipments confirming to relevant IS/international standard as approved by CSPTCL, T & P & furniture etc.
- 5. Erection, Testing, Commissioning and Energization of complete substation.
- 6. The 400 KV Bus Arrangements at substation shall consists of two main Buses of Quad Moose on one and half breaker Bus bar Scheme. The main bus-I and II shall be constructed so as to accommodate future diameter as shown in layout.
- 7. At present double main and transfer bus arrangement exists at 220 KV S/S Dhardehi with 10 no of bays. The existing main bus one and two is constructed with double zebra and transfer bus is constructed with single zebra. The new 220 KV Bus Arrangements for 220 KV side of 400 KV S/s shall consist of two Main Bus on Quad Moose & one Transfer Bus of Twin Moose. Contractor shall erect new 220 KV buses to accommodate proposed 220 KV bays according to layout and shall interconnect the existing and new 220 KV bus by stringing of bus bar using suitable jumpering of twin moose confirming to relevant IS/international standard. The two main buses and transfer bus shall be constructed so as to accommodate future bays as shown in layout
- 8. There shall be 2 sets of 400 KV bus bar protection schemes viz. main I and main II.
- 9. Like wise there shall be two sets of 220 KV bus bar protection scheme viz main I & main II Both main I and main II scheme shall cover the protection of complete 220 KV bus bar (existing 220 KV Bus of 220 KV Dhardehi + proposed 220 KV bus of 400 KV Dhardehi).
- 10. At present 220 KV Bus bar protection scheme of M/s GE T&D India Ltd of relay model B-90 is in service at 220 KV substation Dhardehi with 10 no of 220 KV bays wired. The bus bar protection panel has provision (spare modules) for proposed 220 KV bays to be integrated. All the spare modules shall be wired up to terminal block for future bus bar protection scheme. It shall be the responsibility of the contractor to provide necessary wiring arrangement for extension of CT/PT and DC circuit and cabling for integration of new 220 KV bays in the existing 220 KV bus bar panel. This will form 220 KV bus bar protection main I for the integrated substation.
- 11. 220 KV bus bar protection main II shall be supplied, erected and commissioned by the contractor. Necessary extention of CT/PT and DC circuit belonging to 220 KV bays of existing 220 KV Dhardehi shall be wired to busbar main II in addition to proposed 220 KV bays of 400 KV substation Dhardehi. All the necessary accessories and cabling (all type) are to be provided by the contractor under present scope required for successful completion of the scope of work.
- 12. At present 2 Nos. full 400 KV diameter and 2 no half diameter are being equipped as stated above. A tentative layout diagram of complete substations is enclosed with this tender showing all the 400, 220 & 33 KV bus arrangements, feeders, transformer to be constructed.
- 13. 2 Nos 33 KV bays shall be constructed for station supply from tertiary of 315 MVA Auto transformers. Third source for station supply shall be from existing station transformer connected with 160 MVA auto transformer.

- 14. 400, 220 KV & 33 KV Galvanised Lattice and pipe structures. Towers, Beams and Equipment support structures shall be provided as per drawings and design done by the contractor and approved by CSPTCL except CB support structure which shall be as per CB manufacturer's design.
- 15. At present there is substation automation system of M/s GE T&D India Ltd integrated with existing 220 KV and 132 KV bays of 220/132 KV Dhardehi. A new substation automation system shall be supplied, erected and commissioned in new control room building by the contractor. The substation automation system shall be integrated with existing bays of 220/132 S/s Dhardehi and new proposed bays of 400/220 S/s Dhardehi including hardware and software for local control stations as well as for remote control station along with associated equipments

All the necessary accessories and cabling (all type) are to be provided by the contractor under present scope required for successful completion of the scope of work. The integrated substation automation shall cover the control and monitoring of complete 400/220 KV SS (existing 220 KV and 132 KV bays of 220/132 KV Dhardehi + proposed 400 KV and 220 KV bays of 400/220 KV Dhardehi) to ensure to operate all equipment through new SAS to be installed at new control room .

- 16. At present there is automatic data logging system of M/s Secure integrated with APEX 100 energymeters at 220/132 KV Dhardehi. A new data logging system shall be supplied, erected and commissioned in new control room building. It shall be the responsibility of the contractor to provide necessary arrangement for integration of energy meters of existing 220 KV substation Dhardehi (including all 220 KV and 132 KV bays) and proposed 400 KV substation Dhardehi in new control room building. The existing PC, printer and furniture shall be utilised by CSPTCL after successful commissioning of new data logging system.
- 17. At present there is the visual monitoring system of 10 no. visual camera make M/s hikvision at 220/132 KV Dhardehi. A new visual monitoring system shall be supplied, erected and commissioned in new control room building. It shall be the responsibility of the contractor to provide necessary arrangement for integration of visual cameras of existing 220 KV substation Dhardehi and proposed 400 KV substation Dhardehi in new control room building. The existing PC, server and furniture of old control room shall become spare and shall be utilised by CSPTCL after successful commissioning of new visusal monitoring system.
- 18. A new set of 220 V/48 V batteries, battery chargers and DCDB shall be supplied, erected and commissioned in new control room building by the bidder to cater the entire DC load of 400/220/132 KV S/s Dhardehi. The new DC supply shall be extended as source to existing DCDB of 220 S/s Dhardehi. The existing DC batteries shall be dismantled on commissioning of the new set supplied.
- 19. A new set of ACDB shall be supplied erected and commissioned in new control room building by the bidder to cater the <a href="https://en.action.org/en.a
- 20. The existing earth mat of 220/132 KV S/s was designed for system fault level of 50 KA. The same earth mat will be interconnected with new earth mat designed for new switchyard of 400/220 KV S/s Dhardehi. The complete interconnected earthmat design shall be safe for integrated 400/220/132 KV substation.

21. The bidders are advised to visit the sub-station site and acquaint themselves with existing system commissioned in 220/132 KV substation Dhardehi.

The system fault level may be taken as 50 KA (symmetrical,rms, 3 phase fault on 400 KV & 220 KV) & 25 kA (symmetrical, rms, 3 phase fault on 33 KV). 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 STC rating.

SUPPLY OF EQUIPMENTS:-

Design, engineering, manufacture, testing and Supply of all equipments and accessories for 400/220 KV Substations, which includes following items

- (i) 315 MVA, 400/220 KV auto Transformer along with Nitrogen Fire prevention sheme and Online dissolved gas monitoring scheme, 50 MVAR shunt reactor along with Online dissolved gas monitoring, 145 KV NGR.
- (ii) 400 KV equipments viz SF6 Circuit breaker ,LA, Isolator, CT, CVT
- (iii) 220 KV equipments viz SF6 Circuit Breakers, CT,CVT, LA and Isolators
- (iv) 500 KVA 33/0.415 KV station transformer, 66 KV SF6 CB,CT, PT, Isolator, solid core post insulator all equipments having insulation level 72.5 KV, 39 KV LA for tertiary side of 400/220 KV, 315 MVA Power Transformer.
- (v) Luminaries,
- (vi) High Mast,
- (vii) GI Steel structures,
- (viii) Control & Relay Panels,
- (ix) Complete IEC 61850 based substation automation system to be integrated with existing bays of 220/132 S/s Dhardehi and new proposed bays of 400/220 S/s Dhardehi in new control room building of 400/220 KV S/s 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 400 KV, 220 KV & 33 KV bays (bay as defined in technical specification)
- (x) 220V, 600 AH & 48V, 600AH Battery sets,
- (xi) 220V, 600 AH & 48V, 600AH Battery Chargers,
- (xii) ACDB/DCDB Boards,
- (xiii) Marshalling/Junction box,
- (xiv) Control & power Cables, OFC/ any other cable
- (xv) GI Cable trays,
- (xvi) Quad moose conductor, earth wire.
- (xvii) Hardware, clamps & connectors.
- (xviii) Disc & post insulators,
- (xix) Earth-mat & earthing material,
- (xx) Testing equipments and T&P,
- (xxi) Visual Monitoring System
- (xxii) Furniture etc.
- (xxiii) Fire detection and protection system.
- (xxiv) LT supply system with automatic changeover; controlled and monitored by Substation Automation System.
- (xxv) DG Set with all accessories.
- (xxvi) Galvanised Lattice and pipe structures. Towers, Beams and Equipment support structures shall be provided as per approved drawings except CB support structure which shall be as per CB manufacturer's design.
- (xxvii) Complete Relay and protection system as per Section-Control and relay panels applicable for sub-station with Substation Automation System.
- (xxviii) Any other equipment/ material required for construction of 400/220 KV Substation.

(xxix) Design engineering, manufacture, testing and supply on FOR destination site basis including transportation & insurance, storage & site of mandatory spares.

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

- (a) Foundation of 315 MVA, 400/220 KV auto transformer, reactors along with anchoring, jacking pad and pylon supports, rail track and fire resistant wall between transformers & reactors.
- (b) Foundation for Lattice, pipe structures and equipments
- (c) Foundation for lighting poles, Bay marshalling rooms, panels and control cubicles of equipments and DG set.
- d) Cable trenches along with covers and sump pits.
- (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) Drainage system in the substation.
- (j) Permanent water supply systems for control room cum administrative building, earthing pits ,guard room and exclusive water supply system for Fire fighting pump house building, and fire fighting system.
- (k) Substation fencing and gates.
- (l) Building for Fire fighting pump house and Water storage tank for a 420 CuM Capacity for fire fighting
- (m) Foundation of 500 KVA Auxiliary transformers.
- (n) Control room cum administrative building for the substation alongwith Bay Marshalling Rooms complete in all respects.
- (o) Contouring and substation levelling.
- (p) Detailed Soil investigation including soil resistivity measurement.
- (q) Fire protection system along with its water storage and bore wells
- (r) Parking shed
- (s) Store cum unloading shed, separate store room
- (t) Guard room with attached toilet
- (u) 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, substation automation system wiring and termination schedules, design of air conditioned bay marshalling room, design of fire fighting system 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.

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.

The Contractor shall also be responsible for the overall co-ordination with internal/external agencies, project management, training of Purchaser's manpower, loading, unloading, handling, moving to final destination for successful erection, testing and commissioning of the substation/switchyard.

Design of substation and its associated electrical & mechanical auxiliaries systems includes preparation of foundation & cable trench layout ,finalizing various levels of s/s on the basis of contour drawing to ensure effective drainage, erection key diagrams and electrical and physical clearance diagrams. Control and protection schematics, Substation automation system schematics, wiring and termination schedules, design of air conditioned Bay Marshalling room, design of fire fighting system, 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.

BASIC REFERENCE DRAWINGS

400/220 KV substation, Dhardehi(bilaspur), Distt. Mungeli is an upgradation of existing 220/132 KV SS Dhardehi. For the 400 KV voltage level, one and half breaker switching scheme layout arrangement shall be used. For 220 KV voltage level, double main and single transfer bus scheme layout arrangement shall be used.

Tentative Single line diagram, switchyard plan, land utilization plan, section layout, earth mat layout, SAS architecture, SAS control room desk, tentative bay marshalling room drawing, and cable trench layouts are provided in this tender. Based on the aforesaid drawings, detailed single line diagram, general arrangements and layout drawings of substations shall be developed and submitted. The layout drawing must include all the basic requirement of substation and associated services, fire pump house and water storage tank, positioning of Air Conditioned Bay Marshalling Rooms, Control room, Administrative building, roads and should also indicate the take off arrangement of feeders etc. In case of any difficulty in the layout, the same be brought to the notice of CSPTCL at Pre bid conference.

The auxiliary transformers of rating 500 KVA shall be used to feed the substation auxiliaries.

The 2 Nos. 500 KVA, 33/0.415 kV station transformer shall be connected through overhead conductor to the tertiary of both of the 315 MVA auto transformers and shall be located near the 315 MVA auto transformer. These auxiliary transformers should not be used for construction purpose. The detailed scheme is shown in the single line diagram.

In case of any discrepancy between any Sections and other technical specifications on scope of works, decision of tender awarding authority shall be final.

The bidder is clarified that no mandatory spares shall be used during the commissioning of the equipment. Any spares required for commissioning purpose shall be arranged by the Contractor. The unutilized spares if any brought for commissioning purpose shall be taken back by the contractor.

1 FACILITIES TO BE PROVIDED BY CSPTCL

1.1 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 and provision of transformer etc required for this purpose shall be

done by CSPTCL at their own cost. However, the connection required for availing supply shall be availed by the contractor. The expenditure on this account and the energy charges shall be borne by the contractor. The prevailing energy rates of the state shall be applicable. All further distribution from the same for construction and permanent auxiliary supply shall be made by the contractor. However, in case of failure of power due to any unavoidable circumstances, the contractor shall make his own necessary arrangements like diesel generator sets etc. at his own cost so that progress of work is not affected and Owner shall in no case be responsible for any delay in works because of non-availability of power.

- 1.2 Contractor shall make available construction water supply at substation at his own cost and the CSPTCL shall in no case be responsible for any delay in works because of non availability or inadequate availability of water.
- 1.3 The contractor shall be responsible for safety of human and equipment during the working It will be the responsibility of the Contractor to co-ordinate and obtain Electrical Inspector's clearance before commissioning. Any additional items, modification due to observation of such statutory authorities shall be provided by the Contractor at no extra cost to CSPTCL.

1.4 SPECIFIC REQUIREMENT

- a) The lighting fixtures for switchyard lighting shall be mounted on tubular High Mast Lighting structures wherever these are provided. Where these are not available the fixtures may be mounted on Gantry structures or on other lighting poles to be provided by the contractor.
- b) **Bay marshalling Rooms**.
 - Bay Marshalling Rooms shall be provided for 400 KV bays and 220 KV bays
- c) Bay Marshalling Kiosk
 - In addition to the requirements specified elsewhere in the specification, the bay marshalling room shall have two distinct compartments for the following purpose:
 - (i) To receive two incoming 415V, 3 phase, 63Amps. I\C supply with auto changeover and MCB unit and distribute minimum six outgoing 415V, 1 phase, 16 Amps AC supplies controlled by MCB.
 - (ii) To distribute minimum ten outgoing 240V, 10 Amps single phase supplies to be controlled by MCB to be drawn from above 3 phase incomers.
- 1.5 The bidder shall impart necessary training to Owner's personnel (Three persons) on design, operation, maintenance and commissioning aspect of following items at manufacturer'/supplier's works. The travelling expenses of CSPTCL's personnel will be borne by CSPTCL.
 - i) Circuit breakers -3 days
 - ii) Protection & Automation- Two weeks
 - iii) SAS As indicated in the section for SAS
- 1.6 Supervision of erection, testing and commissioning of Autotransformer, Circuit Breakers Isolators, Control and Protection scheme, SAS shall be done by respective manufacturers.

VARIATION IN QUANTITIES: -

The quantities of equipments indicated in the schedules/Annexure B-1 to B-11, C-1, D-1 & D-2 are tentative a-nd 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 substation as per the direction of concerned engineer- in-charge of CSPTCL.

SECTION-I

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

The price bid against tender specification No. **TR-21/02** 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 07.01.2022 **upto 14:00 hrs** and due date & time of opening of techno-commercial bid is **07.01.2022 upto 14:10 hrs**.

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-11, C-1, D-1 & D-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-11, C-1, D-1, D-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.
- The e-bidding vendor user manual displayed on website-https://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

- 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** (**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 for 400/220 KV Substation
- c) Section- III Annexures, schedules & formats
- d) Section –IV Price bid Annexures for substation
- e) Section- V Vendor List

2. Volume-II: Technical Specification for

- a) Section-I Construction of Substation
- b) Section-II Price variation Formulae for EHV Substation equipments

3. Volume-III: Drawings

- a) Section-I Drawings related to EHV Sub-station
- b) Section-II 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 (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 deviation (Format "A-10") shall not be considered and shall have no effect.
- Only those who have purchased / downloaded the copy of relevant Specification No. **TR-21/02** 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 (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-21/02** 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 to A-28 & Un-priced Annexures- B-1 to B-11, C-1, D-1, D-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 E ngineer (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 "Bidders to note this to avoid rejection of their bid" 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 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.

1.14. **CHECK LIST:** - The check list (Annexure-A-25) 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. EARNEST MONEY DEPOSIT:

- 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.
- 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. PRE-OUALIFYING REQUIREMENTS:-

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

3.1 FINANCIAL CRITERIA OF POR:-

- i) Net Worth:- 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) shall 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) MAAT: 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. 79.40 Cr. 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.47.64 Cr**. of minimum financial criteria regarding turn over requirement. The other partner should meet not less than **Rs.19.85 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 not be less than **13.23 Cr** or (ii) evidence of access to or availability of fund based credit facilities not be less than **13.23 Cr** or (iii) sum of liquid assets and access to availability of fund based credit facilities of not less than **Rs.13.23 Cr**.

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 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 except non funded facility 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.13.23 Cr.** taking into account the bidder's overall cash flow requirements for this contract and his current works' commitment for other contracts.

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. 13.23 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-26) issued by Chartered Accountant duly mentioning UDIN no of that CA certificate confirming fulfilment of following criteria:
 - a) The 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 **30.09.2021** should be outstanding / overdue.
 - b) The 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) The 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 bidder/ 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.

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 a case comes to notice regarding submission of forged / fake document in any other tender under process in CSPTCL, up to date of opening of price bid against 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.

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 self-attested documentary proof in support of having the following Pre-Qualifying Requirement (PQR)

S.No.	Voltage	-	Other partner (in case of JV)
1	Class 400 KV	case of JV	
1	400 KV	Project capability: (A) Sole bidder/lead	(B) Other partner (in case of
		partner in case of JV The sole bidder/ lead partner of JV should have constructed and commissioned at least following EHV Substation on turnkey basis during last seven financial years i.e. FY 2014-15 to 2020-21 (between 1st April 2014 & 31st March 2021) against orders issued by following Indian entities:	JV): In case of JV/ consortium, the other partner of JV/ consortium should have constructed & commissioned minimum 1 No. Bay (either transformer or feeder bay) of 220KV voltage level or higher class on turnkey basis in any following Indian entities:
		(i) Power utilities owned and controlled by Central or State Govt. or (ii) PSUs or (iii) Govt. Organizations • 1 (One) No. 400KV (or above voltage class) substation with substation automation system on turnkey basis (with or without supply of power transformer and reactor). The date of order should not be older than 10 years from the date of issue of NIT of the instant tender.	(i) Power utilities owned and controlled by Central or State Govt. or (ii) PSUs or (iii) Govt. organizations (with or without supply of power transformer in case of transformer bay) during last seven financial years i.e. FY 2014-15 to 2020-21 (between 1st April 2014 & 31st March 2021). The date of order should not be older than 10 years from the date of issue of NIT of the instant tender.
		and	and
		The above substation should be in successful operation for minimum 1(one) year from the date of commissioning as on date of	The bay constructed and commissioned against the submitted order should be in successful operation for minimum 1 (one) year from the

issues of NIT of the instant date of commissioning as on date of issues of NIT of the tender. The word "Commissioning" instant tender. shall mean energization of The experience of other partner Sub-station duly certified by should be either as a sole bidder above entities mentioned in or any partner of JV. (i),(ii) and (iii) above Note. The word "Commissioning" i)In case of sole bidder,the shall mean energization of bay experience of bidder shall duly certified by above entities. be either as a sole bidder/ lead partner. ii)In case of JV of instant tender, the experience of lead partner should be either as a sole bidder/ lead partner.

Note:-

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/ informations 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.

The bidder shall submit complete detailed work order copies along with annexures and performance certificate of corresponding work order for satisfactory operation of substation issued from the <u>power utilities or PSU's or Govt. organizations</u> in the name of participating bidder, indicating date of commencement of work and it's commissioning.

3.3. OTHER ELIGIBILITY CRITERIA:-

- 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 **OR** 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 of tender should be submitted with the TC bid.
- vi) The bidder should have GST registration certificate. 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-28** as per order No. F.No.6/18/2019-PPD dated 23/07/2020 **read with amended order No.18/37/2020-PPD Dtd.08.02.2021** issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India.
- ix) The bidder shall have to submit pre contract integrity pact in the format enclosed as Annexure A-22 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.

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-21** (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". The bid document should have been purchased and submitted by 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-20** (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 earlier 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 documents to be furnished in respect of financial criteria:-

- i) Self-attested copies (i.e., copies attested by authorised signatory of the tender) of the audited annual accounts for last 5 years (i.e., FY 2015-16 to FY 2019-20). 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.
- ii) A certificate from Chartered Accountant in original duly mentioning UDIN no of that CA certificate indicating details of Net Worth of last three F.Y(FY 2017-18, 2018-19 & 2019-20)., Turnover of last five F.Y(i.e., FY 2015-16 to FY 2019-20). & break up of available liquid asset for sole bidder/lead partner of JV and also other partner of JV, self attested by authorised signatory of tender as on a date not older 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.
- iii) A certificate pertaining to evidence of access to or availability of credit facilities, a certificate from banker(s) in original {as per Annexure-A-7} indicating various fund based limits sanctioned to the bidder/ JV partners and the extent of utilisation as on date should be furnished. Wherever necessary, CSPTCL may make queries with the bidder's banker. Such certificate should have been issued not earlier than 3 months prior to the date of bid opening.
- iv) Regarding cash flow requirement, bidder shall submit 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.
- v) The bidder/ JV partners shall submit Certificates (in original as per prescribed format in Annexure A-26) issued by Chartered Accountant duly mentioning UDIN no of that CA, certificate confirming fulfilment of following criteria:-

- a) Sole bidder/ each partner of JV 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 **30.09.2021** should be outstanding / overdue.
- b) Sole bidder/ each partner of JV 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) The 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 the date of opening of price bid against the instant tender, if 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 and action will be taken against the bidder as per relevant provisions of the tender.
- vi) A declaration by the sole bidder/ each partner of JV (Separately) (as per prescribed Annexure A-27) 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
- vii) A declaration by the sole bidder/ each partner of JV (Separately) (as per prescribed Annexure A-27) 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.

The documents to be furnished in respect of technical experience criteria":-

- (a) **for sole bidder/lead partner in case of JV:** Complete detailed order copy (self attested by authorised signatory of the tender), in support of technical experience criteria of PQR for having constructed & commissioned minimum 1 (one) No. 400 KV (or above voltage class) Sub-station with substation automation system on turnkey basis (with or without supply of power transformer and reactor) during last seven years i.e. FY 2014-15 to FY 2020-21 (between 1st April'2014 & 31st March'2021) against order issued by Power Utilities owned and controlled by central or State Govt. or PSU's or Govt. organization Complete order copy along with annexure containing bill of quantity/ scope of work etc shall be invariably submitted in support of technical experience criteria of PQR. The date of order should not be older than 10 years from the date of issue of NIT of the instant tender.
- (b) for other partner in case of JV: Complete detailed order copy (self attested by authorised signatory of the tender), in support of technical experience criteria of PQR for having constructed & commissioned minimum 1 No. Bay (either transformer or feeder bay) of 220KV voltage level or higher class on turnkey basis during last seven years i.e.. FY 2014-15 to FY 2020-21 (between 1st April'2014 & 31st March'2021) against order issued by Power Utilities owned and controlled by central or State Govt. or PSU's or Govt. organization Complete order copy along with annexure containing bill of quantity/ scope of work etc shall be invariably submitted in support of technical experience criteria of PQR. The date of order should not be older than 10 years from the date of issue of NIT of the instant tender.

(c) The sole bidder/ both partners of JV shall submit:

Self attested copy (by authorised signatory of the tender) of performance certificate of corresponding work order (for which orders have been furnished) for successful commissioning & satisfactory operation of the above 1 (one) No. sub-station/ bay (as applicable) for a period of at least one year (from the date of commissioning) as on the date of issue of NIT of instant tender, indicating date of commencement of work and date of commissioning of the sub-station/ bay, duly issued by the concerned Power

Utilities owned and controlled by Central or state Govt. or PSUs or Govt. organizations in the name of participating bidder.

The word "Commissioning" shall mean energization of Sub-station duly certified by the above entities.

The documents to be furnished in respect of other eligibility criteria:

- (i) Self attested 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 or 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.
- (ii) 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.
- (iii) Bidder shall also furnish undertakings (as prescribed in Annexure A-4 & Annexure A-5) in support that the bidder has adequate sub-station design infrastructure, erection facilities, capacity and procedures including quality control.
- (iv) Power of attorney issued to legally authorised signatory of tender should be submitted with the TC bid.
- (v) The bidder should submit GST registration certificate.
- (vi) 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 respectively.
- (vii) In case of JV, an Undertaking entered into, signed by the Joint Venture/Consortium partners, in proforma A-20 (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 earlier 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.
- (viii) In case of JV, an agreement for authorizing one partner to act as "Lead partner" in Annexure A-21 (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 earlier 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.
- (ix) 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.
- (x) A certificate to be produced by the bidder as per format given in Annexure-28 as per order No. F.No.6/18/2019-PPD dtd 23.07.2020 read with amended order No.18/37/2020-PPD Dtd.08.02.2021 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India (DoE Order).
- xi) Pre-contract Integrity pact in prescribed format in Annexure A-22 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.

- (i) Vital document to be submitted with the T/C bid: Duly filled in "Check list" in Annexure A-25 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 etc. 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 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.
- 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-11, C-1, D-1, D-2 to assess the quantities being offered.

For evaluation of techno-commercial bid, duly filled in **Annexure A-1 to Annexure A-28** 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 bid, may please refer the "Special Instuctions 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-11 (supply of materials for sub-station), C-1 (civil works), D-1 (Erection charges), D-2 (Testing & Commissioning charges), } 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. PRICE-BID & ITS EVALUATION :-

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.

CSPTCL 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 CSPTCL may consider appropriate, will be announced by the CSPTCL 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.

Bids not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.

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-1 to B-11, C-1, D-1, D-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 have been included in the price schedule i.e. B-1 to B-11, C-1, D-1, D-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 315 MVA, 400/220 KV Power transformer should be within the range prescribed below for respective losses (without any positive tolerance):

S.N.	Particular	315 MVA, 400/220 KV Power transformer	
		Min.	Max.
1.	No load loss in KW	81	90
2.	Load loss in KW at rated	427.5	475

	voltage, rated frequency		
	and rated current at 75°C		
3.	Auxiliary loss in KW	18	20

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. 5,08,908.00 per KW
- ii. For differential load loss above minimum value : Rs. 2,70,739.00 per
- iii. For differential auxiliary loss above minimum value : Rs. 2,03,563.00 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-24.

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, respective 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.

Permissible losses of 50 MVAR reactor:

The permissible range of no load (Iron loss) of 50 MVAR Reactor shall be 90 KW-100 KW.

In case the offered no load loss quoted by the bidder is more than the maximum permissible limit i.e. 100KW (without any positive tolerance), the bid shall be considered as non responsive and shall be out rightly rejected without any correspondence in the matter. In case the no load loss offered by the bidder is below the minimum range prescribed above i.e. 90KW, the bid shall be treated as responsive. However, for price bid evaluation purpose, the minimum range of the no load loss i.e. 90KW prescribed above shall be considered.

Capitalisation of no load loss of 50 MVAR shunt reactor:

The capitalisation of no load loss for the bidder who has quoted above the minimum of the range of no load loss i.e.90 KW shall be done @ Rs 5,08,908.00 per KW (differential of quoted loss and minimum value of no load loss i.e. 90 KW).

In case a bidder quotes no load loss below 90 KW, the value of loss shall be considered equal to 90 KW for price bid evaluation purpose.

However, it should be clearly noted that during final testing of the shunt reactor, the measured no load loss should not exceed the value quoted by the bidder in the bid. In case the no load loss exceeds the quoted loss, the shunt reactor shall not be accepted. During final testing of each of Power transformer/Shunt Reactor, the measured losses (individually i.e. no load, load & auxiliary loss as applicable) should not exceed the values guaranteed by the bidder in the bid. In case of any of the losses exceed the guaranteed losses, respective transformer/ Reactor shall not be accepted. No positive tolerance shall be permitted on the guaranteed values of the respective losses.

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 (Planning & Project) shall be final and conclusive.

6. TAXES

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

- (i) The breakup of taxes like 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"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. Any variation in this respect within scheduled completion period shall be to the account of CSPTCL.
 - If the rate of applicable cess beyond contractual completion period undergoes upward revision, the payment will continue to be made only on the basis of rates prevailing during completion period. In case the rate of cess undergoes downward revision then the delayed works beyond contractual completion period will attract reduced rate of cess.
- (iii) Payment of other taxes/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. PRE-BID CONFERENCE:-

A pre-bid conference of all the prospective bidders participating in Tender No TR-21/02 shall be conducted at 11.30 Hrs on 24/12/2021 in the O/o ED (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-21/02 available on the web-site www.cspc.co.in/csptcl/tender notice/Planning & Project office thoroughly and send their queries to the O/o Executive Director/Chief Engineer (Planning & Project) through fax message on Fax no. 0771-2574246.. 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 adequate conflicts and there no between various clauses/sections/specifications. The clarification/decision of the Executive Director (Planning & Project) shall be final and conclusive.

SECTION-II

(GENERAL CONDITIONS OF CONTRACT)

SECTION - II GENERAL CONDITIONS OF CONTRACT FOR EHV SUB-STATION WORKS

·	AL CONDITIONS OF CONTRACT FOR EHV SUB-STATION WORKS
Clause No.	PARTICULARS
1	Definition of Terms
2	Contract document
3	Manner of execution
4	Variation, additions & omissions
5	Inspection during erection
6	Completion of work
7	Contractors default liabilities
8	Force majeure
9	Rejection of works
10	Extension of time
11	Guarantee period
12	Performance guarantee
13	Terms of payment
14	Liquidated Damage for delay in completion of contract
15	Security Deposit
16	Insurance
17	Inspection of equipments
18	Dispatch instructions
19	Payment due from the contractor
20	Jurisdiction of High Court of Bilaspur
21	Contractors responsibility:
22	Responsibility to rectify loss & damage
23	Non-assignments
24	Certificates not to affect rights of CSPTCL
25	Settlement of dispute
26	Arbitration
27	Laws governing contract
28	Language and measures
29	Correspondence
30	Secrecy
31	Agreement
32	Time schedule & clarifications
33	Safety precautions
34	Engagement of workers by contractor
35	Nature of contract
36	Prices
37	Design of 400 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.
42	Storage & shipment of equipment/material
43	Unsatisfactory performance
44	
	Drawing & literatures Discrepancy with emproved drawing
46	Discrepancy with approved drawing

47	Electrical inspector fee
48	Compliance with regulations
49	Full time site engineer
50	EPF code
51	List of vendors
52	Limitatiion of Liability

SECTION - II 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 (Procurement & Projects).
- "The Engineer- in- Charge" shall mean the Engineer or Engineers authorised by the Executive Director (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.
- "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 (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 shall be completed within the period specified i.e. **30** (**Thirty**) months excluding one month preparation time from the date of handing over of site including rainy season. The letter of handing over of the site for construction of Substation shall be issued separately by Engineer in-charge for civil works authorized by CSPTCL.

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 (SS O & M) in presence of contractor's representative.
- 6.3 **Taking over of sub-station**:- Upon receipt of intimation about completion of the substation 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 substation has been so taken over.

It may be noted that substation shall be taken over only after completion of all the works involved in it.

The necessary certificate of taking 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 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 substation 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 out-rightly 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 and shunt reactor 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. CSPTCL will arrange 400KV or 220 KV supply to sub-station within one month from the date of completion of sub-station 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/shunt reactor: The Power transformer and shunt reactor shall be guaranteed for a period of 42 months from the date of satisfactory commissioning of transformer and shunt reactor along with all accessories. Please note that the date of commissioning of last accessory will be treated as date of commissioning of transformer/shunt reactor. The transformer/ shunt reactor 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/ shunt reactor 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/ shunt reactor per week of delay or part thereof, subject to a maximum ceiling of 10% of the cost of the transformer/ shunt reactor. 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/ shunt reactor 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/ shunt reactor is required to be taken back to the works for repairing) whichever is later.

 $\cap R$

Not repaired within seven months from date of lifting of failed/ defective transformer/ shunt reactor, penal action may be taken which will include forfeiture of performance guarantee of transformer/ shunt reactor 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/ SHUNT REACTOR:-

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

a) First time failure within guarantee period:

- i) If the transformer/ shunt reactor fails within 12 months from the initial commissioning, the guarantee period shall get extended to 42 months from the date of satisfactory recommissioning of transformer/ shunt reactor after repairs along with all accessories.
- ii) If the transformer/ shunt reactor 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/ shunt reactor within guarantee period:

If the transformer/ shunt reactor 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 re-commissioning (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/ shunt reactor 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/ shunt reactor within guarantee period:

If the transformer/ shunt reactor 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/ shunt reactor.
- ii) Forfeiture of additional 10% performance BG of transformer/ shunt reactor 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/ shunt reactor manufacture shall be deleted from the vendor list of CSPTCL for power transformer/ shunt reactor 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 (1st or 2nd 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 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 After completion of work in all respect and commissioning of Sub-station and 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 & shunt reactors).
- 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/ shunt reactor 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/ shunt reactor 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) **SUPPLY:** 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 13.1(D) of tender. 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 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 two 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.

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

Progr	essive payments (in % of the cost 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 etc.	58%
Ix	Complete painting work	64%
X	External water supply, I/C fixing of tank with inlet, outlet & over flow arrangement	68%
Xi	Balance finishing work, plinth protection, steps, porch tiling, false ceiling etc.	90%

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

(C) **ERECTION, TESTING & COMMISSIONING**: -

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 (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:-
 - 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-18.
 - (ii) Copy of the letter issued by order placing authority, conveying acceptance of PERT chart.
- **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 on monthly outstanding advance. Presently, CSPTCL is rated as 'A+' by PFC. Accordingly interest shall be charged on monthly outstanding advanced at a

rate notified by PFC for capital works of 'A+' category STUS as for CSPTCL at the time of sanction of advance.. 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 there to, in respect of commissioning of EHV Sub-station, 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) for each calendar week (or part thereof) for delay of the work covered under the project of this tender. For this purpose, the date of taking over by CSPTCL Engineer-in-charge of EHT works shall be reckoned as the date of completion.

In any case, the liquidated damages shall not exceed 5% (Five percent) of the total price for completed and uncompleted portion of the sub-station (supply, Civil & ETC work) of the project.

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/Shunt reactor per week of delay or part thereof, subject to a maximum ceiling of 10% of the cost of the transformer/Shunt reactor. 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 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-23 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 and reactor) 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.

- **Structure :-**D.I. will be issued after completion of respective foundations. i)
- 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, 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.
- Power Transformers, Shunt reactor and NGR: D.I. will be issued after the iv) readiness of all the foundations of the Sub-station and completion of structural erection of equipments and the erection of gantries.
- Cables :- D.I. will be issued after readiness of main cable trenches and the Bay v) Marshalling Rooms.
- Fire fighting Equipments: readiness of the pump house. vi)

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

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

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.

CONTRACTOR'S RESPONSIBILITY: 21.

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.
- 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 Execuive Director (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 (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.

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.
- d) The contractor who is awarded the work should engage maximum number of labour belonging of CG state. Further, for skilled working in EHV substation viz erection of structures, stringing work etc. Contractor should arrange training of the labours engaged from CG state from time to time to ensure skill development in them. Intimation regarding total number of labours engaged for various works and number of labours from CG state should be given to OIC and order placing authority every month".

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. The contract award shall be placed on successful bidder as follows:-

- 1. Supply of Transformers and shunt reactors, 400 KV, 220KV & 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.

All the 3 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) 315MVA, 400/220/33 KV Auto Transformers and 50 MVAR reactor, 3MVAR NGR
- (ii) 400KV, 220KV & 33KV current transformer and potential transformer/CVT (as applicable).
- (iii) 400 KV, 220KV & 33 KV Isolators.
- (iv) 400 KV, 220 KV & 33 KV LA
- (v) 400 KV, 220 KV & 66 KV Circuit breakers.
- (vi) All GI structures.

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

The prevailing price variation formulas prescribed by IEEMA for Power Transformer, instrument transformer & coupling capacitor, isolators & switchgear, Lighting arrestor,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 exworks 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 400/220 KV SUB STATION SWITCH YARD:-

The contractor is required to submit the design & switchyard plan layout for 400/220 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. 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. STRUCTURAL DRAWINGS:-** The 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 RODS ETC:-

Since the weight of earth rods 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 rods varies, the bidder will be paid the extra charges/less charges due to increase/decrease in weight.

(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 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), ED/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-18) 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 Sub-station 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-incharge of the work.

51. LIST OF VENDORS:

All the equipments/materials required for construction of the 400/220 KV sub-station shall be supplied strictly as per the "list of vendors" indicated in section V of vol I of the tender document TR-21/02. 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. Any deviation in the vendor list shall be permitted during execution of the project only in exceptional cases with prior approval of CSPTCL. The equipments/ materials which are not covered in this vendor list shall be of reputed make with prior approval of CSPTCL.

52. LIMITATION 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

(c) 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.

SECTION – III

PRICE BID ANNEXURES

FOR SUB-STATION

ANNEXURE - B

ABSTRACT OF PRICE BID ANNEXURES

CONSTRUCTION OF 400/220 KV SUB-STATIONS AT DHARDEHI (BILASPUR) ON TURNKEY BASIS

	PARTICULARS	DETAILS	Annexur e	Amount (Rs.)	Discount (%)	Amount after discount (Rs.)
	Cost of supply of Sub Station	A. 400 KV Side S/Yard & Control Room Equipments	B - 1			
	equipments & material.	B. 220 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 400/220		E. Control cables, dg set, & Battery & Battery Charger.	B – 5			
KV Sub- station		B – 6				
	Cost of supply of G. I. Steel	Supply of G. I. Steel Structure	B - 7			
	Cost of T&P etc	T & P, Instruments ETC.	B – 8			
	Cost of Furniture	Furniture For Control Room	B – 9			
	Cost of Sub-station Automation System	Sub-station Automation System etc	B - 10			
	Cost of Spares	Mandatory Spares	B - 11			
	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			
	GRAND TOTA	AL (TOTAL OF ALL PRICE BID A	NNEXUR	ES) (Rs.)		

Rupees in words	
Date	SIGNATURE OF BIDDER
Place	NAME
	DESIGNATION
	(SEAL)

PRICE BID ANNEXURE - B-1

$400~\mathrm{KV}$ SIDE SWITCHYARD EQUIPMENTS & CONTROL ROOM EQUIPMENTS FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

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	315 MVA, 400/220/33 KV, three phase X'mer with Oil & Accessories, terminal connectors, with Nitrogen fire prevention scheme, online dissolved gas monitoring scheme including type & special tests	Nos .	2						
2	400 KV ,50 MVAR three phase Shunt reactor for line with oil & Accessories, terminal connectors, online dissolved gas monitoring scheme including type & special tests	Nos ·	2						
3	3 MVAR,145KV NGR for 50 MVAR reactor (including type and special tests)	Nos ·	2						
4	400KV SF ₆ Circuit Breaker with structure complete and terminal connectors.								
a.	with PIR (for closing)	Nos	4						
b.	without PIR	Nos	6						
c.	with CSD (for reactors)	Nos	2						
5	400KV Current Transformer having ratio 2000-1000/1-1-1-1-1A with clamps	Nos	36						
6	400KV CVT having ratio 400KV/110V (with four secondaries)	Nos	18						
7	Lightning Arrestor 390 KV with terminal connectors	Nos	24						
8	400 KV Isolator (3-φ) with single earth switch and support insulators	set	24						
9	400 KV Isolator (3-φ) with double earth switch and support insulators	Set	4						
10	400 KV Protection Panel								

	for Main and Tie					
a.	Feeder Bay panels with Auto Reclosure	set	4			
b.	Shunt reactor Bay panel	set	2			
c.	Tie bay panels with Autoreclosure	Set	4			
d.	Transformer Bay panels	set	2			
11(a)	400 KV Bus Bar protection panel (Independent Duplicate bus bar protection ie Main 1 and Main 2 for Bus I)	Set	1			
11(b)	400 KV Bus Bar protection panel(Independent Duplicate bus bar protection ie Main 1 and Main 2 for Bus II)	Set	1			
12	Solid core Post Insulators on 400 KV side for conductor support.	No	42			
13	120 KV LA for NGR	No	2			
TOT	AL 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. Bidders are requested to go through the tender specification before quoting the rate.

Signature of the Bidder

PRICE BID ANNEXURE - B-2 220 KV SIDE SWITCH YARD EQUIPMENTS & CONTROL ROOM EQUIPMENTS FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

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	220 KV SF6 circuit breaker with structures and terminal connectors complete.								
a.	Single Pole Reclosure type	Nos.	2						
b.	Normal Duty type	Nos.	3						
2	220 KV Current Transformer ratio 1600- 800/1-1-1-1-1-1A with terminal connectors.	Nos.	15						
3	220 KV CVT with terminal connectors having ratio 220KV/110V(with four secondaries)	Nos.	6						
4	Lightning Arrestor 198 KV with terminal connectors	Nos.	12						
5	220 KV Isolator (3-φ) with earth switch, with support insulators	No.	2						
6	220 KV Isolator (3-φ) without earth switch, with support insulators	No.	16						
7	220 KV Protection Panel for feeders and transformer								
a.	with auto reclose and carrier protection facility	sets	2						
b.	Without auto reclose for transformer.	sets	2						
c.	220 KV Bus coupler Protection Panel	Sets	1						
8	220 KV Bus Bar protection panel scheme for two main and one transfer bus(with main & check scheme)	Set	1						
9	Solid core Post insulators for conductor support	No	78						
	TOTAL ANNEXURE I	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. Bidders are requested to go through the tender specification before quoting the rate.

Signature of the Bidder

PRICE BID ANNEXURE - B-3 33 KV SIDE EQUIPMENTS & CONTROL ROOM EQUIPMENTS FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

				Unit	Package,	Total	GST	Total	Total
SN	Particular	Unit	Qty	rate (Ex- works Price)	Freight & insurance	Unit Rate = 5+6	@ 18% on Sl.No.7	Unit Rate (FORD) = 7+8	Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	66 KV SF6 Circuit Breaker(Rated for 72.5KV insulation class) with Structures & terminal clamps and connectors	No.	2						
2	66 KV Current Transformer ratio 50-25/1-1-1 A(Rated for 72.5KV insulation Class) with terminal clamps and connectors	No.	6						
3	66 KV Current Transformer Ratio 1000-500/1-1-1-1 A (Rated for 72.5KV insulation) with terminal clamps and connectors	No.	6						
4	33 KV/110V Potential Transformer (Rated for 72.5KV) with terminal clamps and connectors	No.	6						
5	39 KV LA for tertiary winding with terminal clamps& connectors	No.	6						
6	72.5 KV three phase Isolator with insulators and terminal clamps and connectors without earth switch, 1200 Amp	No.	6						
7	72.5 KV Solid core Insulator	No.	15						
8	33 KV Solid core Insulator	No	35			•			
9	33/0.4 KV, 500 KVA Stn. X'mer (with 72.5 KV class HV insulation and clearances)with terminal clamps and connectors	Set	2						
10	33 KV control & relay panel for tertiary/station X'mer complete with 3x O/C + 1 x E/F Back up Numerical relays withBCUs. TOTAL ANNEXURE B-	No.	2						
L				L	i	L	i	i	i

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.

PRICE BID ANNEXURE - B-4

CONDUCTOR, DISC INSULATORS, CLAMPS, CONNECTORS & HARDWARES, EARTHING MATERIAL ETC. FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

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	Moose ACSR Conductor	Km	25						
2	4" IPS Aluminium tube	Meter	3000						
3	4" IPS Aluminium sleeve	Lot	1						
4	Galvanised Steel Ground Wire 7/3.66 m.m.	Kms	4						
5	Clamps, Spacers, etc. as per requirement (Lump Sum prices for Clamps & Connectors as given below)								
i	T-clamp for 4" IPS Tubular bus conductor run & twin moose ACSR tap								
ii	T-clamp for ACSR moose run & moose tap								
iii	Bus post clamp for 4" IPS tubular bus conductor sliding type								
iv	Bus post clamp for 4"IPS tubular bus conductor expansion type								
V	Bus post clamp for twin moose, spacing 450mm								
vi	Bus post clamp for 4" IPS tubular bus conductor	Lot	1						
vii	Bus post clamp for coupling sleeves for tubular bus								
viii	PG clamp for moose to moose conductor								
ix	Rigid type spacers for quadruple ACSR moose								
X	Rigid type spacers for twin ACSR moose 300mm spacing								
xi	Rigid type spacers for twin ACSR moose 450mm/250mm/300mm spacing								
xii	T clamp for quad moose run to moose tap								
xiii	Clamp to support earth wire on structure								

		•			•	 	-
xiv	Pad clamp/Heavy duty						
	compression type Lug for						
	earth wire						
XV	Sag compensating springs						
xvi	Other clamps, if required						
	and not mentioned above						
6	Disc Insulators &						
	Hardware:						
i	Tension Disc 160 KN for						
	400 KV & 220 KV						
• •	(antifog type)						
ii	Suspension Disc 120 KN						
iii	(antifog type)						
111	Suspension Disc 70 KN						
iv	(antifog type)						
10	Single suspension hardware for twin moose						
	with drop clamps spacing						
	450mm						
v	Single suspension						
·	hardware for twin moose						
	with suspension clamps	Lot	1				
	spacing 450mm	200	1				
vi	Double tension hardware						
	for twin moose spacing						
	450mm						
vii	Double tension hardware						
	for quad moose spacing						
	450mm						
viii	Double tension hardware						
	for twin moose spacing						
•	250mm/300mm						
ix	Double tension hardware						
	for quad moose spacing 250mm/300mm						

X	Any other hardware, if required and not						
	required and not mentioned above						
	TOTAL ANNEXURE B-4						
	I O I AL AIMEAUNE D-4						

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.

Signature of the Bidder

PRICE BID ANNEXURE - B-5 CONTROL CABLES, DG SET, BATTERY & BATTERY CHARGER FOR 400/220 KV SUBSTATION AT DHARDEHI (BILASPUR)

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	Armoured multistrand								
	copper control cable								
	with individual cores numbered at regular								
	intervals.								
(i)	2 C, 4 sq. mm								
(ii)	4 C, 6 sq. mm								
(iii)	4 C, 4 sq. mm	т.,	1						
(iv)	2 C, 2.5 sq. mm	Lot	1						
(v)	4 C, 2.5 sq. mm								
(vi)	10 C, 2.5 sq. mm								
(vii)	14 C, 2.5 sq. mm								
(viii)	19 C, 2.5sq m								
(ix)	27 C, 2.5 sq. mm								
(x)	Any other size								
2	Cable trays (GI perforated) (In running								
	meter)								
(i)	300 mm wide	Lot	1						
(ii)	600 mm wide	Lot							
(iii)	650 mm wide								
3	GI steel support								
	75x50x5mm for cable	Lot	1						
	tray								
4	Armoured Aluminium								
	Power Cables								
(i)	single core 630 sq mm								
	aluminium								
(ii)	3.5 core 300 sq mm aluminium								
	single core 300 sq mm								
(iii)	aluminium								
<i>(</i> •)	3.5 core 150 sq mm								
(iv)	aluminium	Lot	1						
(v)	3.5 core 70 sq mm		1						
(٧)	aluminium								
(vi)	3.5 core 25 sq mm								
\· - /	aluminium								
	1 core 100 sq mm								
(vii)	stranded copper cable for Battery/Battery								
	charger connections								
	Any other armoured								
(viii)	Al power cable								
5	Battery: 220 V,600 A	Sets	2						

	Н					
6	Battery: 48 V, 600 A H	Sets	2			
7	Battery Charger: 220 V, 60 A(one set comprises of one main float cum boost charger and one standby float cum boost charger)	Sets	2			
8	Battery Charger: 48 V, 60 A (one set comprises of one main float cum boost charger and one standby float cum boost charger)	Sets	2			
9	250 KVA DG Set with Silent Enclosure, control panel and accessories	Sets	1			
1	ΓΟΤΑL 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.

Signature of the Bidder

PRICE BID ANNEXURE - B-6 LUMINAIRE, HIGH MAST, ACDB/DCDB BOARD, FIRE FIGHTING & OTHER MISCELLANEOUS EQUIPMENTS FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

		(212)	ASPU.	••)					
SN	Particular	Unit	Qty	U nit ra te (E x-w or ks Pr ice	Pack age, Frei ght & insur ance	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	High mast alongwith LED Flood Light Luminaries, complete for switchyard light (Height 25 Meters) with twelve Nos fittings, Each fitting shall have 2X350 W and meet illumination as per tender specifications(complete with structure and illuminations)	No.	10						
2	Indoor, Decorative LED Luminaries 1x36W Lux level as per CBIP recommendations	Lot	1						
3	Indoor LED Luminaries set complete 36 W (For Battery room Lux level as per CBIP recommendations)	Lot	1						
4	Decorative LED Gate Lights(25 W)	No.	10						
5	Yard peripheral street Light assembled with 1 meter arm with lighting fixture LED 50 W with fittings (with structure complete)including cable junction box	No.	30						
6	56" size 230 V AC Ceiling fans for Control Room Building	Lot	1						
7	12" Exhaust fans 230 V-AC, Single phase	No.	6						
8	18" Exhaust fans 230 V-AC, Single phase	No.	6						
9	1 X 240W LED lamps in high flood lighting fixture mounted on Swivel support, integral control gear	No.	6						
10	Any other luminaire required	Set	1						
11	Miscellaneous equipments								
(i)	415 V AC Bus Bar								

_							
	system(with two BUS					 	
	system/ACDBs and	Lot	1				
	buscouplers) with Three						
	incoming supply and a standby						
	DG having LT breakers and						
	control/relay panels with						
	automatic changeover schemes,						
	control and monitoring						
	integrated in SAS as per tender						
	specification.						
(::)	<u> </u>						
(ii)	DC Bus bar system with two						
	DCDBs and a Bus Coupler for						
	220 V DC as per tender	-					
	specification. The proposed DC	Lot	1				
	supply shall be extended as						
	source to existing DCDB of						
	220/132 S/s Dhardehi						
(iii)	DC Bus bar system with two						
	DCDBs and a Bus Coupler for						
	48 V DC as per tender						
	specification. The proposed DC	Lot	1				
	supply shall be extended as						
	source to existing DCDB of						
	220/132 S/s Dhardehi						
(iv)	Marshalling Box for Station	No.	2				
	X'mer	NO.					
(v)	Single line diagram board	No.	2				
(vi)	LDB (out door lighting) with 4						
	pole MCB & suitable no. of	Lot	1				
	outgoing MCBs)						
(vii)	400 Amp weather proof outdoor						<u> </u>
	3 phase 4 pole supply ACDB						
	for welding/ filter machine with	No.	6				
	power supply box (in 400 KV,						
	220KV & 33KV Switch yards)						
(viii)	CT Junction Boxes with 48 nos.			<mark></mark>			
(a)	Connectors (disconnecting						
(4)	type.) with space heaters and	No	17				
	CFL illumination.						
(viii)	CVT/CT/PT Junction Boxes			<u> </u>			
(b)	with 36 nos. Connectors						
(0)		No	14				
	(disconnecting type.) with space						
	heaters and CFL illumination.						
(ix)	Marshalling Boxes for;	NΙς	1 =				
(a)	415 V AC for 400 KV and 220	No.	15				
	KV bays						
(x)	6-Lever lock for all Isolators &	Lot	1				
<u> </u>	Key box						
(xi)	First Aid Box with Chart	No.	6				
(xii)	Fire protection system						
a)	Pumping arrangement for HVW						
	system & hydrant system	job	1				
	complete with all pumps, piping	J	_				
	valves & fittings etc in side						

b) Hydrant system, compete O/G & U/G piping & accessories etc out side pump house c) HVW spray system, hydrant system and complete O/G & U/G piping & accessories etc out side pump house for i) 315 MVA Auto transformers - 02 Nos ii) 50 MVAR Reactors along with NGR - 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure vessel	
& U/G piping & accessories etc out side pump house c) HVW spray system, hydrant system and complete O/G & U/G piping & accessories etc out side pump house for i) 315 MVA Auto transformers – 02 Nos ii) 50 MVAR Reactors along with NGR – 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
etc out side pump house c) HVW spray system, hydrant system and complete O/G & U/G piping & accessories etc out side pump house for i) 315 MVA Auto transformers – 02 Nos ii) 50 MVAR Reactors along with NGR – 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
c) HVW spray system, hydrant system and complete O/G & U/G piping & accessories etc out side pump house for i) 315 MVA Auto transformers – 02 Nos ii) 50 MVAR Reactors along with NGR – 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG no 5 b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
system and complete O/G & U/G piping & accessories etc out side pump house for i) 315 MVA Auto transformers – 02 Nos ii) 50 MVAR Reactors along with NGR – 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
U/G piping & accessories etc out side pump house for i) 315 MVA Auto transformers - 02 Nos ii) 50 MVAR Reactors along with NGR - 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
out side pump house for i) 315 MVA Auto transformers - 02 Nos ii) 50 MVAR Reactors along with NGR - 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
i) 315 MVA Auto transformers - 02 Nos ii) 50 MVAR Reactors along with NGR - 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 kG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
ii) 50 MVAR Reactors along with NGR – 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
ii) 50 MVAR Reactors along with NGR – 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
NGR – 02No (xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG no 5 b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hipress 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
(xiii) Portable fire extinguishers. a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hipress 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
a) Dry chemical powder type 5 kg no 10 b) Carbon Dioxide type 3 kg no 10 (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hipress 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
b) Carbon Dioxide type 3 kg (xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hipress 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
(xiv) Wheel/ Trolley mounted fire extinguishers. a) Dry chemical powder type 25	
extinguishers. a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
a) Dry chemical powder type 25 KG b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
b) Carbon Dioxide type 22 Kg no 5 (xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
(xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
(xv) Water mist and CAF fire Extinguisher Capacity 50 Ltr of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted set i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
of ultralite carbon composite with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted set i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
with PET liner (85 kg) PESO approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted set i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
approved cylinder (6.8 Ltr 300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
300 Bar).Model ASKA Hi press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted set i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
press 50 Carbon-E with fire rating 55 A,IV B. trolley mounted i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
i) One Spare compressed air cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
cylinder 6.8 ltr x 300 bar ii) 10 No. O-rings for the pressure	
ii) 10 No. O-rings for the pressure	
T COBOL	
iii) One Can 5 ltr. Special AFFF	
compound/ASKA Fx agent	
iv) Tool kit – 1 No.	
(xvi) Water mist and CAF fire	
extinguisher high pressure back	
pack type of ultra lite carbon	
composite with PET liner (9 lt)	
PESO approved cylinder (2 Ltr	1
X 300 Bar).Model ASKA Hi	
press 9 Carbon-E with fire set 1	
rating 55 A,233 B	
i) one Spare air cylinder of ultra	
lite carbon composite with PET	
liner,	
ii) 10 No. O-rings for the pressure	
vessel	

iii)	One Can 5 ltr. Special AFFF compound/ASKA Fx agent					
iv)	Tool kit- 1 No.					
(xvii)	Fire Bucket	no	12			
(xviii)	Bucket Stands	no	2			
(xix)	Smoke detector system	set	1			
12	GI rod electrode without test					
12	link directly driven into ground					
(i)	25 mm Dia./ 2500 mm length	no	120			
(ii)	40 mm dia/3000 mm length	no	160			
13	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 and NGR					
	For earthing (4 pipe)	No	9			
	TOTAL ANNEXURE B-6					

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.

Signature of the Bidder

PRICE BID ANNEXURE - B-7 G. I. STEEL STRUCTURE FOR SWITCH YARD FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

SN	Particular	Qty (in Nos.)	Total weight in MT	Ex- works Price/ MT	Package , Freight & insuranc e	Total Unit Rate/MT = 5+6	GST @ 18% on Sl.No.7	Total Unit Rate /MT (FORD) = 7+8	Total Amount = Sl. No.4 x Sl.No.9
1	2	3	4	5	6	7	8	9	10
1	G.I. STRUCTURE FOR (along with foundation bolts and fastners)								
(i)	400 KV Gantry Column (including Busbar Gantry columns)	42	370						
(ii)	400 KV Gantry Beam	36	190						
2	400 KV LA	24	5.7						
3	400 KV CT	36	8.9						
4	400 KV CVT	18	3.6						
5	400 KV PI	42	10						
6	400 KV Isolators 3 phase sets	28	40						
7	220 KV Gantry Column (including Busbar Gantry columns)	53	360						
8	220 KV Gantry Beam	35	125						
9	220 KV LA	12	2.8						
10	220 KV C T	15	2.9						
11	220 KV CVT	6	1.1						
12	220 KV PI	78	20.3						
13	220 KV Isolators 3 phase sets	18	27						
14	120 KV LA	2	0.5						
15	39 KV LA	6	1						
16	66 KV C T 50- 25/1-1-1A	6	1						
17	66 KV CT 1000/1-1-1-1A	6	1						
18	33 KV P T (72.5 KV class)	6	1						
19	66 KV Isolator 3 phase sets	6	4.4						
20	66 KV PI(72.5 KV class)	15	2.7						
21	33 KV PI	3	0.7						

22	MS rod 40mm dia round for main earth mat		400			
23	G.I. Nut-Bolts, electroplated washers etc. (assorted size)	Lot	1			
24	75 x 12 mm GI Flats for Earthing		54			
25	50 x 6 mm GI Flats for riser		15			
26	Structure for Loading / Unloading gantry (6.5 mtr height) for minimum five MT capacity	1	5			
TO	ΓAL ANNEXURE Ε	3-7				

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.

Signature of the Bidder

PRICE BID ANNEXURE - B-8 T & P's INSTRUMENTS ETC. FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

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	Oil Filter Plant Complete (6000 LPH) with required accessories with inlet/outlet pipes as per tender specifications	No ·	1						
2	Oil storage tank (MS) capacity 15KL	No	4						
3	Baur make KFM3000/Megger make KF 875–Automatic Water Content Measuring System.(With three year performance Guarantee)	No	1						
4	Neoprene Rubber sheet size 3mm, 5'x3' make Gujrat Cork& Rubber Pvt. Ltd.		24						
5	Discharge Rods with leads for working in 400KV system		12						
6	Tool Boxes (Taparia make) Each containing								
i)	DE -Spanner Set of 25								
ii)	Ring-Spanner Set of 25								
iii)	Tubular, Spanner Set of 25								
iv)	Torque wrench for various size of nut and bolt tightening upto 30 KG-M	No	2						
v)	Filler gauge, vernier calliper, screw gauge								
vi) vii)	L end keys complete sets Box spanner with ratchet set of 25								
7	Aluminium Ladder: Extensible self supported (30 ft after extension)	No ·	2						
8	Aluminium Pedestal type Ladder Extensible 24 ft	No	2						
9	Aluminium single ladder 20 ft height	No.	2						
10	Rechargeable flash light	No.	4						
11	Hand Gloves 33KV class	Pair	4						-
12	Digital Multi-meter for AC	No.	3						

	/ DC measurement								
	Make: FLUKE 187								
13	Tong Testers digital (0-	No.	2						
a)	500A) with big jaws	1,0.	_						
13	Clamp on meter AC/DC								
b)	range 0-200 mA and 20A Make KURITSU Model	No.	2						
	2010								
13	Clamp On amperemeters	No.	2						
c)	AC 0-20 A	INO.							
14	Chain pulley block 5 tones	No.	1						
15	capacity Micro processor based								
13	BDV of oil testing kit								
	(Automatic 0-100KV)								
	Deltatronic Model:	No.	1						
	Portatest/ Baur make	110.							
	DTA100 C/Megger make OTS 100 (With three year								
	performance Guarantee)								
16	Welding set 25 KVA	No.	2						
17	DC earth leakage tester								
	(with three years	No.	1						
10	performance guarantee)								
18 a)	10 KV Insulation Tester (0-100000Mohm) make								
a)	Megger make model S1-								
	1054/2 or better (With	No.	1						
	three year performance								
	Guarantee)								
18	5 KV Insulation Tester (0-								
b)	100000Mohm) make Vanguard model IRM-								
	5000 or better (With three	No.	1						
	year performance								
	Guarantee)								
19	Digital earth tester (4								
	terminals) complete make- Motwani model DET-	No.	1						
	20/Rishabh MI 2124 or	110.	1						
	latest								
20	Transformer Diagnostic								
	test set with capacitance								
	and Tan delta measurement Model								
	measurement Model OMICRON CPC 100 with								
	Test Cards included for								
	testing Transformers, CTs	No.	1						
	& VTs , resistance and								
	2000A current booster,								
	PRIMARY TEST								
	MANAGER (PTM). OMICRON CPTD1 -								
	Automatic Tan Delta &								
L		Lİ		<u>L</u>	L	L	L	<u>L</u>	L

•••••				 				
	Capacitance Measurement							
	system up to 12 kV							
	alongwith Operating/Data							
	Extraction/Analysis							
	Device with operating							
	software interface as per							
	tender specifications. and							
	console							
	(With three year							
	performance Guarantee)							
21	OMICRON CMC 356 -							
	Three Phase Automatic							
	Relay Test Kit with Over							
	Current, Advance Distance							
	& Advance Differential							
	and advanced Transplay							
	Software and OMICRON							
	CONTROL CENTRE							
	(OCC) with LCD console							
	1 ` ′							
	and Operating/Data							
	Extraction/Analysis							
	Device with operating							
	software interface as per							
	tender specifications./							
	Megger make SMRT 36-							
	30P1F1I1S1 alongwith							
	deluxe test leads &							
	accessories kit(part	No.	1					
	No.1001-69) with console							
	and Operating/Data							
	Extraction/Analysis							
	Device with operating							
	software interface as per							
	tender specifications./Freja							
	make with Operating/Data							
	Extraction/Analysis							
	Device with operating							
	software interface as per							
	tender specifications.							
	The test kits should have							
	the facility of testing IEDs							
	based on IEC61850							
	protocol (goose)							
	(With three year							
	performance Guarantee)							
	Hydaulic Mobile Crane 12							
22	ton 40 ft telescopic boom	No.	1					
22	type having hoist on its	110.	1					
	boom Escorts/ACE							
	Aerial platform vehicle							
	(hydraulic propelled 35							
23	ft,360 degree	No.	1					
	manoeuvring/platform							
	capacity 230 Kg,mounted							
<u>L</u>				<u> </u>	1	<u> </u>	<u> </u>	L

•				T	T	T	T
	on a Tata						
	Motors/Mahindra make						
	four wheel vehicle and the						
	hydraulic pump of arial						
	platform shall be operated						
	with special gear						
	arrangement of the same						
	vehicle engine. The control						
	shall be on both platform						
	and the ground level.						
	(With three year						
	performance Guarantee)						
	Sweep Frequency						
	Response Analyser of						
	Omicron/M5400 of Doble						
	make/FRX150 of Megger						
	make with Operating/Data						
24	Extraction/Analysis	No.	1				
	Device with operating						
	software interface with						
	laptop as per tender						
	specifications. (With						
	three year performance						
	Guarantee)						
25	Stainless Steel oil sample	No.	5				
	bottle						
	Offline DGA	No	1				
	equipment,Transport						
26	X,Make GE Kelman,UK						
	(With three year						
	performance Guarantee)						
	ACSR conductor cutter	No	1				
27	hydraulic suitable for						
	Moose &Zebra conductor						
	BAUR DTLC oil tester for						
	dissipation factor, specific						
20	resistance & relative	No	1				
28	permittivity (With Three		1				
	year performance						
	guarantee)						
	Vacuum cleaner cum						
	blower with multiple	No	_				
29	attachments (Industrial	- 10	2				
	Grade)						
	Complete set of Circuit						
	breaker analyzer kit with						
	having ULTIMA HISAC						
	of SCOPE make 24						
	Channel, (four main + four	No					
30	I .	TAO	1				
	<u> </u>						
	simultaneously, 8 auxiliary						
	channels , three coil						
	currents, three voltage						
	channels for travel						

	characteristic, 12 analog channels for DCRM, Set of Transducers,100 A inbuilt DC source, PIR resitance measurement, test leads suitable for 400 KV Circuit Breakers, Operating/Data Extraction/Analysis Device with operating software interface as per tender specifications.(With three year performance Guarantee)					
31	SF-6 Gas leakage detector	No	2			
32	Remote temperature detector Make FlukeTix 560/FLIR T460 (With three year performance Guarantee)	No	1			
	TOTAL ANNEXURE B-8					

- Note:- 1. All the T&P should be as per latest amended I.S.S.
 - 2. The contractor shall demonstrate the actual working conditions of each & every T&P supplied.
 - 3. Wherever make is not specified, the approval of same from CSPTCL will be required.
 - 4. Please indicate ex-works price, Package freight & insurance and GST in respective columns
 - 5. Cess under B&OCWA: Applicable cess @ 1% shall be deducted from each bill.
 - 6. Bidders are requested to go through the tender specification before quoting the rates.

PRICE BID ANNEXURE - B-9 FURNITURE FOR CONTROL ROOM FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

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	06						
2	Table for Control Room Operator & office 4 ½' x 2 ½'	No	10						
3	Chairs - Half Arm Rest Type	No	30						
4	Stools	No	10						
5	Steel Almirah (Big –78" with locker)	No	06						
6	Steel Almirah (Big –78")	No	06						
7	Air Conditioners 2 tonne capacity (Split type)	No	12						
8	File cabinet (standard size)	No	08						
9	Book Shelf	No	08						
	TOTAL ANNEXURE	B-9							

- Note: 1. All furniture shall be of Godrej make.
 - 2. Please indicate ex-works price, excise duty, sales tax, Package, freight & insurance and any other taxes in respective columns.
 - 3. Cess @ 1% of the cost of supply of equipments/material except transformer will be deducted. from each bills for remittance to the concerned Government department. Bidders are requested to quote the rates accordingly.
 - 4. Bidders are requested to go through the tender specification before quoting the rates.

ANNEXURE -B-10 SUB-STATION AUTOMATION SYSTEM FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

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 alongwith 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 as per tender specification.	Set	1						
i) ii) iii) iv)	Complete substation automation system of 400/220 KV S/s based on IEC 61850 protocol for 400/220KV S/s to be integrated with existing bays of 220/132 S/s Dhardehi and new proposed bays of 400/220 S/s Dhardehi in new control room building (including hardware & software with licences for local control station at Dhardehi (Bilaspur) , (Distt. Mungeli), remote control station at Raipur and communication with SLDC) alongwith associated equipments, cabinets for servers and SAS control desks, OFC/any other cable required to connect SAS/PC with BCU, relay, energymeter alongwith conduit for routing of such cable ,Training in Substation Automation System in two batches of 6 persons each for two weeks each as per tender specification for following bays: 2 nos 400KV diameters & 2 no.400 KV half diameter (2 nos X'mer bays,4 nos Tie bays,4 Nos feeder bays) 5 nos 220 KV bays (2 nos X'mer bays,2 Nos feeder bays, 1 No Bus tie bay) 3 nos 33 KV bays LT auxiliary system including LT supply system , DG set, Fire fighting system etc	Set	1						

v)	6 Nos future 400 KV bays and 6 nos 220 KV future bays and 4 no 132 KV future bays					
vi)	Existing 10 no. 220 KV bays and 5 no. 132 KV bays of existing 220/132 S/s Dhardehi					
2	Visual Monitoring System alongwith required cable and accessories					
3	a) Visual camera	Nos.	18			
	b) Server/PC with 29' LED monitor	No.	1			
4	GPS based time synchronising equipment with Visual display unit (having display size of 100 mm for alphabates and numerals).	Set	1			
	TOTAL ANNEXURE B-10					

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.

ANNEXURE -B-11 MANDATORY SPARES FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

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	400KV Current Transformer having ratio 2000-1000/1-1-1-1-1-1-1 A with clamps as per tender specifications	No.	2						
2	400KV CVT having ratio 400KV/110V with clamps(with four secondaries) as per tender specifications	No.	1						
3	220KV Current Transformer having ratio with clamps 1600-800/1-1-1-1-1-1A with clamps as per tender specifications	No.	2						
4	220KV CVT having ratio 220KV/110V with clamps(with four secondaries) as per tender specifications	No.	1						
5	Lightning Arrestor 198 KV with terminal connectors as per tender specifications	No.	2						
6	Lightning Arrestor 390 KV with terminal connectors as per tender specifications	No.	2						
7	39 KV Lightening arrestor with terminal connector as per tender specifications	No.	2						
8	30 KV Lightening arrestor with terminal connector as per tender specifications	No.	2						
9	400 KV Isolator (3-φ) with single earth switch and support insulators as per tender specifications	Set	1						
10	400 KV Isolator (3-φ) with double earth switch and support insulators as per tender specifications	Set	1						
11	220 KV Isolator (3-φ) with single earth switch and support insulators as per tender specifications	Set	1						
12	220 KV Isolator (3-φ) without earth switch and with support insulators as per tender specifications	Set	1						

	400 KV Solid core Post Insulators		0			
13		No.	9			
	as per tender specifications 220 KV Solid core Post Insulators		9			
14	as per tender specifications	No.	9			
	33 KV Solid core Post Insulators		9			
15		No.	9			
	as per tender specifications		1			
16	400 KV Transformer bushing as	No.	1			
	per tender specifications 220 KV Transformer bushing as		1			
17	per tender specifications	No.	1			
			1			
18	Secure meters make Apex energy meter as per tender specifications	No.	1			
	Ethernet switch as per tender		1			
19	specifications	No.	1			
	Three winding Differential relay		1			
20	for transformer of type Main 1 as	No.	1			
20	per tender specifications	110.				
	Three winding Differential relay		1			
21	for transformer of type Main 2 as	No.	1			
21	per tender specifications	110.				
	Numerical Distance Protection		1			
22	Relay type Main 1	No.	1			
	Numerical Distance Protection		1			
23	Relay type Main 2	No.	1			
	Numerical Bay Controller unit as		2			
24	per tender specifications	No.	_			
	66 KV Current		2			
<u> </u>	Transformer(Rated for 72.5KV)		_			
25	.Ratio 50-25/1-1-1 A as per	No.				
	tender specifications					
	66 KV Current Transformer	No.	1			
2	(Rated for 72.5KV).Ratio 1000-					
26	500/1-1-1-1 A as per tender					
	specifications					
	33 KV/110 V Potential	No.	2			
27	Transformer (Rated for 72.5 KV					
	Class) as per tender specifications					
28	Spare FOC of different length	Nos	10			
29	i. 400 KV CT clamps	Nos	6			
<i>L</i> J	ii 220 KV CT clamps	Nos	6			
30	Monitor for S/s automation	No.	1			
50	station HMI 29 Inches	110.				
31	SF6 gas filled Cylinder with	No.	2			
J1	attachments	110.				
32	145 KV Reactor Bushing (same	No.	1			
<i></i>	as that supplied with the reactor)	110.				
	420 KV Reactor Bushing (same		1			
33	as that supplied with the 50	No.				
	MVAR)		-			
	72.5 KV Transformer Bushing		1			
34	(same as that supplied with the	No.				
	315 MVA Transformer)					
	TOTAL ANNEXURE B-11					

PRICE BID ANNEXURE - C-1 EQUIPMENTS FOUNDATIONS AND OTHER CIVIL WORKS FOR 400/220 KV SUBSTATION AT DHARDEHI (BILASPUR)

	Particulars	Qty.	Unit	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 as per tender specification.						
2	315 MVA ,Three Phase,Auto X'mer	2	No				
	400/220/33 KV		3.7				
3	400 KV 50 MVAR Reactor	2	No				
4	145KV,3 MVAR NGR for Reactor	2	No				
5	120KV LA for NGR	2	No				
6	400 KV Gantry Column	34	No				
7	400 KV Main Bus I	4	No				
8	400 KV Main Bus II	4	No				
9	400 KV Isolator Three phase	28	No				
10	400 KV CT	36	No				
11	400 KV LA	24	No				
12	400 KV CVT	18	No				
13	400KV PI	42	No				
14	400 KV SF6 breaker	12	No				
15	220 KV Gantry Column(including Bus	53	No				
13	Bar Gantry Columns)						
16	220 KV Isolator Three phase	18	No				
17	220 KV CT	15	No				
18	220 KV LA	12	No				
19	220 KV CVT	6	No				
20	220 KV PI	78	No				
21	220 KV SF6 breaker	5	No				
22	72.5 KV VCB	2	No				
23	72.5 KV Isolator Three phase	6	Set				
24	72.5 KV CT 50-25/1-1-1 A	6	No				
25	72.5 KV CT 1000-500/1-1-1-1 A	6	No				
26	39 KV LA	6	No				
27	33 KV PT (72.5 KV class)	6	No				
28	72.5 KV PI	15	No				
29	33 KV PI	3	NO				
30	33/ 0.4 KV 500 KVA Stn. X'mer	2	No				
31	Loading / Unloading gantry (6.5 mtrs	1	No				
31	height, 35 MT)	1					
32	Control Room Building cum administrative building with associated facilities including internal and external electrification with concealed copper wiring, main switch & LDB with MCBs, telephone, LAN points with modular switches, sockets & switch boxes, ISI approved 12W CFL/florefittings, fixtures, internal	1	JOB				

	·		,			
	sanitation including septic tank, man					
	holes etc., pre-construction anti termite					
	treatment ,calcium silicate board water					
	proof false ceiling, internal cable					
	trenches covered with 6mm thick MS					
	chequered plate, specified floor & wall					
	finishes aluminium doors, windows,					
	ventilators, MS grills etc. complete in					
	all respects as per approved drawings,					
	specifications and direction of					
	Engineer-in-charge of CSPTCL.(For					
	area of control room refer					
	specifications)					
	RCC Cable Trenches with RCC covers					
33						
	specifications and direction of					
• .	Engineer-In-Charge.					
i)	As per section 1-1 in Cable Trench		Meter			
	drawing- Inside dimension	300				
	1100mmx1000mm – Four layers of	300				
	650mm Tray					
ii)	As per section 2-2 in Cable Trench		Meter			
	drawing – Inside dimension	1000				
	1050mmx950mm – Four layers of	1900				
	600mm Tray					
:::\			Meter			
iii)	As per section 3-3 in Cable Trench		Meter			
	drawing – Inside dimension	600				
	700mmx475mm – Four layers of					
	450mm Tray					
iv)	As per section 4-4 in Cable Trench		Meter			
	drawing – Inside dimension 400mmx	1700				
	535mm – Two layers of 400mm Tray					
v)	As per section 5-5 Cable Trench		Meter			
	drawing – Buried cable section for	1000				
	lighting pole on roadside	1000				
773)	· · · · · · · · · · · · · · · · · · ·	150	Meter			
vi)	For Transformer neutral as specified -	130	wieler			
34	Complete External water supply					
	arrangement with two numbers					
	minimum150 mm diameter tube well					
	bores, each with minimum 5000 litre					
	per hourwater output with separate					
	pump houses ,3-phase water cooled					
	submersible pumps of KSB/Kirlosker					
	make of min. 2 H.P. or more as per					
	requirement /directions of CSPTCL's					
	engineer in charge, Crompton Greaves	1	JOB			
	/Havells make control panels, Finolex/					
	Havells make cables, two overhead					
	tanks (ISI marked) of 1,000 litres					
	capacity above Control Room					
	Building, one surface water tank of					
	20,000 litre capacity with RCC cover					
	and with complete water supply					
	arrangements .All two bores shall be					
<u> </u>			<u> </u>	 	<u> </u>	<u> </u>

·	·	,		 	·	
	connected to water tanks and earth pits					
	with ISI marked medium grade pipe					
	lines, fittings etc. of approved make					
	and construction of two no. rain water					
	harvesting pit for bore recharge with					
	arrangement of collecting rain water					
	from control room roof complete as per					
	specifications, in standard manner and					
	as per direction of engineer in charge					
	of CSPTCL.					
35	5.5 metre wide RCC approach and					
33	internal road, laid over CC 1:3:6 base,					
	WMM sub base including desired extra					
	widening at curve with side drains,					
	shoulders, culverts, cable trench					
	crossings etc. complete as per IRC					
	standards, specifications, approved					
	drawings & direction of engineer in					
	charge of CSPTCL.	1260	R.M.			
	charge of CSI 1CL.	1200	10.111.			
	Rail cum RCC roads shall be					
	constructed in space between the					
	Autotransformer and reactor plinth and					
	the nearest RCC road as per					
	specifications, approved drawings &					
	direction of engineer in charge of					
	CSPTCL.					
36						
36	Yard Levelling.					
36 i)	Yard Levelling. Yard Levelling up to required level					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL.					
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard	60,000	Cu.M			
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL.	60,000	Cu.M			
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard	60,000	Cu.M			
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used	60,000	Cu.M			
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of	60,000	Cu.M			
	Yard Levelling. Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction using roler and excess surplus material	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction using roler and excess surplus material balance after filling of switchyard will	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction using roler and excess surplus material balance after filling of switchyard will be used for embankment construction	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction using roler and excess surplus material balance after filling of switchyard will be used for embankment construction of peripheral road with transportation,	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction using roler and excess surplus material balance after filling of switchyard will be used for embankment construction	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction using roler and excess surplus material balance after filling of switchyard will be used for embankment construction of peripheral road with transportation, watering and required compaction	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction using roler and excess surplus material balance after filling of switchyard will be used for embankment construction of peripheral road with transportation, watering and required compaction using vibratory roler etc. and rates shall	60,000	Cu.M			
	Yard Levelling up to required level i.e.cutting and disposal of earth with all leads and lifts, compaction to 95 % of standard proctor density, dressing etc with all labour, material T&P, transportation etc complete in all respects including applying approved herbicides in entire area, providing required drains etc as per site condition, specification, direction and approval of Engineer in Charge of CSPTCL. (The earth obtained from switchyard cutting and excess earth remained after backfilling of foundation shall be used for filling of low lying area of switchyard upto FGL with transportation watering, compaction using roler and excess surplus material balance after filling of switchyard will be used for embankment construction of peripheral road with transportation, watering and required compaction	60,000	Cu.M			

compacting with stone dust of 150 MM compacted thickness in the yard area including all transportation, loading and unloading at site all material, labour, royalty, taxes etc. complete as per specification, direction and approval of Engineer in charge of CSPTCL. Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh yard fencing with 450 mm verticle	
including all transportation, loading and unloading at site all material, labour, royalty, taxes etc. complete as per specification, direction and approval of Engineer in charge of CSPTCL. Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
and unloading at site all material, labour, royalty, taxes etc. complete as per specification, direction and approval of Engineer in charge of CSPTCL. Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
labour, royalty, taxes etc. complete as per specification, direction and approval of Engineer in charge of CSPTCL. Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
per specification, direction and approval of Engineer in charge of CSPTCL. Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
approval of Engineer in charge of CSPTCL. Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
approval of Engineer in charge of CSPTCL. Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
CSPTCL. Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
Yard Metalling complete with 40mm nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
nominal single size crusher broken hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
hard metal 100 mm thick including stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
stacking, spreading of metal, all transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
transportation, loading and unloading, screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
screening at site all material, labour, royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
royalty taxes etc. complete as per specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
specifications and direction of engineer in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
in charge of CSPTCL 38 Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
Chain link mesh fencing: Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
Construction of 3000 mm high unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
unclimbable hot deep galvanizing 75mmx75mmx8 gauge chain link mesh	
75mmx75mmx8 gauge chain link mesh	
vard fencing with 450 mm verticle	
(i) height V shaped extension having six 565 R.M.	
row of barbed wire, brick masonry	
wall, RCC beam at bottom with pile	
foundation complete as per approved	
drawing, specifications and direction of	
engineer-in-charge.	
Dismantling of existing chain link	
mesh fencing of 220/132 KV S/s	
dhardehi and reutilising the same,	
construction of 3000 mm high	
unclimbable hot deep galvanizing	
75mmx75mmx8 gauge chain link mesh	
yard fencing with 450 mm verticle	
(ii) height V shaped extension having six 320 R.M.	
row of barbed wire, brick masonry	
wall, RCC beam at bottom with pile	
foundation complete by utilizing the dismantled material obtained from	
dismantling as per approved drawing,	
specifications and direction of	
engineer-in-charge.	
Glow sign Board of substation, duly	
protected by wire mesh, 6'x4' size with	
39 steel support on the top of control room 1 No.	
as per approved drawing, specifications	
and direction of engineer in charge of	
CSPTCL	
Main gate as per approved drawing,	
40 specifications and direction of engineer 2 No.	
in alarma of CCDTCI	
in charge of CSPTCL.	
1 Substation sign board (4'x6') size with GI steel structures as per approved 1 No.	

	drawing, specifications and direction of engineer in charge of CSPTCL.				
42	Foundations for periphery yard Tubular lighting pole structures.	30	No.		
43	Construction of rainwater harvesting pit as per approved drawing, specifications, and direction of engineer in charge of CSPTCL.	2	No.		
44	Construction of RCC collecting pit below Transformer/reactor with G.I. mesh grating for collecting X'mer /reactors oil as per specifications, approved drawing and direction of engineer in charge of CSPTCL.				
i)	For Autotransformer (Capacity 100 K L Approx)	2	No.		
ii)	For Reactor (Capacity 50 K L Approx)	2	No.		
45	Foundations for lighting High Mast structures as per specifications.	10	Nos.		
46	RCC Parking shed for control room cum administrative building as per approved drawing, specifications, and direction of engineer in charge of CSPTCL	50	Sq.m		
47	Construction of Camping house building (at level 0.5m higher than the substation switchyard level) fully furnished with associated facilities including internal and external electrification with concealed copper wiring, 13 no. ceiling fans ,17 no.T-5 tube lights, 5 no. CFL, 6 no. exhaust fans , switch & LDB with MCBs, telephone, LAN points, buzzer/call bell points in rooms and hall for calling attendant , buzzer/call in every room , internal & external water supply(Complete External water supply arrangement with one number minimum150 mm diameter tube well bore, with minimum 5000 litre per hourwater output with separate pump houses, 3-phase water cooled submersible pumps of KSB/Kirlosker make of min. 2 H.P. or more as per requirement/directions of CSPTCL's engineer in charge, Crompton Greaves/Havells make control panels, Finolex/ Havells make control panels, Finolex/ Havells make cables, one overhead tanks (ISI marked) of 1,000 litres capacity above Camping house), and sanitation including septic tank for 50 users, man holes etc. , specified floor & wall finishes ,wooden/pvc	1	JOB		

						Ī	;
	doors, aluminium three track						
	windows(third track shall have shutter						
	with SS mesh) with MS Grill. There						
	will be one porch ,four bed rooms with						
	attach toilet, one hall, one kitchen,						
	one store, one servant room and one						
	common toilet in camping house. Two						
	no. modular bed with mattresses and						
	pillows, one no. study table with chair,						
	one no steel almirah and one no.						
	dressing table shall be provided in each						
	bed room . One no. dining table with						
	chairs, one no. wooden sofa and one						
	no. centre table,32" Full HD						
	1080p,LED TV with DTH set top box						
	shall be provided in hall. In four nos						
	bed rooms, one number 2T split AC and						
	in one no. hall two nos 2T Split AC						
	shall be provided . In kitchen, two						
	numbers granite platforms of sufficient						
	size with one no. Shelf under them						
	complete with one set each of Steel and						
	· •						
	bone china dining set, one no 275 L						
	Refrigerator, one number 25 L						
	Microwave oven, two nos LPG						
	cylinders and a gas stove shall be						
	provided .In kitchen ,bed rooms , store						
	and servant room cup-boards of						
	sufficient size shall be provided						
	complete as per specifications						
	,approved drawings, approval and						
	direction of Engineer-in-charge of						
	CSPTCL.(Approx. Area of camping						
	house excluding porch – 250 Sq.M.)						
48	Guard room with attached toilet as per						
	approved drawing specifications and	15	Sam				
	direction of engineer in charge of	13	Sq.m				
	CSPTCL						
49	3.75 mtr wide RCC road laid over CC						
	1:3:6 base, WMM sub base including						
	desired extra widening at curve, with						
	side drains, shoulders, culvert and	000	DМ				
	cable trench crossing inside the yard as	800	R M				
	per IRC standard specifications,						
	approved drawing and direction of						
	engineer in charge of CSPTCL.						
50	Separate DG Room and attached Filter						
	room for storage of Filter Machine as	_					
	per approved drawing(Area 50 Sq M	1	No				
	adequately ventilated)						
51	RCC fire resistant walls for			 			
J1							
	transformers and reactor as per approved drawing, specifications &	2	No.				
	direction of engineer in charge of						
<u> </u>	direction of engineer in charge of				<u> </u>	<u> </u>	

	CSPTCL				
52	Fire fighting pump house with surfaced storage water tank capacity of 420 cubic meter including complete water				
	supply system, 150 dia bore well, submersible pump etc. complete in all respects as per specifications, approved drawing. The pump house shall have a minimum clearance of wall to equipment of at least two meters as	1	JOB		
52	working space.				
53 a)	A Store cum unloading shed separate from the control room as per approved drawing, specifications and direction of engineer in charge of CSPTCL with provision of ramp.	128	Sq.m		
53 b)	Uncovered raised RCC platform for storage of Outdoor equipments	100	Sq.m		
54	Air conditioned Bay marshalling room (with RCC roof) including 2T air				
	conditioner for each room as per approved drawing and specifications Area – 30 Sq M approx.	5	No.		
55	Foundation for Marshalling Boxes for;				
i)	415 V AC for 400 KV and 220 KV bays	15	No		
56	Construction of RCC sump tank for Transformer/reactor for collecting X'mer Oil from all the Xmers with complete drainage system for oil from Xmers to oil sump with pump of adequate capacity for draining/dewatering as per specifications, approved drawing and direction of engineer in charge of CSPTCL.				
i)	For Autotransformer (Capacity 100 K L Approx)	1	No		
ii)	For Reactor (Capacity 50 K L Approx)	1	No		
	Construction of Chain link mesh fencing cum RCC retaining wall as per				
57	specification, provided drawing and directions of engineer in charge of CSPTCL				
i)	With soil retaining height above NGL/FGL upto 1.0 meter	420	RM		
58	Providing 100 mm thick CC 1:3:6 pitching/22 cm thick grouted stone pitching if required (without Quarry spalls) with individual stones of 22 cm depth and min size 0.014 cu m in	2000	Sq. M		
59	cement mortar 1:6 Providing and laying CC flooring around control room, storage shade etc.floring shall be laid in 2mtr*2 mtr	30	Sq m		

	panel with glass strips. Floring shall be 100 mm thick CC 1:2:4 laid over 100 mm thick CC 1:4:8 complete as per specification and direction of Engineer incharge of CSPTCL				
60	Geo Technical Investigation as per Tender Specification	1	JOB		
61	3.75 metre wide WMM peripheral road all along the land boundary of company complete as per IRC standards, specifications, approved drawings & direction of engineer in charge of CSPTCL. (The earth obtained from switchyard cutting and foundations shall be used for embankment construction with proper compaction using vibratory plate compactor etc and additional earth , if any , required for construction of embankment shall be arranged by the contractor)	2600	RM		
	TOTAL ANNEXURE C-1				

NOTE:-

- 1 GPS co ordinates of proposed 400/220 KV substation- 21.9525350 ,81.9110440 Please indicate Unit rate and GST in respective columns
- 2) Cess under B&OCWA: Applicable cess @1% shall be deducted from each bill.
- 3) 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.
- 4) Rates should be quoted for each foundation separately. **Rates should not be quoted in LOT**.
- 5) The Quantity shown above may vary as per site conditions. The payment shall be done on actual measurement basis.
- 6) (i) FGL of existing 220/132 KV S/s 99.2 M
 - (ii) Proposed FGL for 220 KV yard of new 400/220 KV S/s 99.2 M
 - (iii) Proposed FGL for 400KV yard (first step) of new 400/220 KV S/s 100.8 M
 - (iv) Proposed FGL for 400KV yard (second step) of new 400/220KV S/s 101.8 M
- 7) Land contour plan of the area and land utilization plan are enclosed in Volume-III of this tender document.

PRICE BID ANNEXURE – D-1 ERECTION CHARGES FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

S.N o.	Particulars	Qty.	Unit	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
	STRUCTURE:						
	Erection of S/S structure		3.7				
1	400 KV Gantry Columns	34	No				
2	400 KV Gantry Beam	36	No				
3	400 KV LA	24	No				
4	400 KV CT	36	No				
5	400 KV CVT	18	No				
6	400 KV PI	42	No				
7	400 KV Isolators 3 phase	28	Set				
8	400 KV Bus Bar Main-I	4	No				
9	400 KV Bus Bar Main-II	4	No				
10	220 KV Gantry Column	53	No				
11	220 KV Gantry Beam	35	No				
12	220 KV LA	12	No				
13	220 KV C T	15	No				
14	220 KV CVT	6	No				
15	220 KV PI	78	No				
16	220 KV Isolators 3 phase	18	set				
17	120 KV LA	2	No				
18	39 KV LA for tertiary	6	No				
19	66 KV C T for 50-25/1-1-1A	6	No				
20	66 KV CT 1000-500/1-1-1- 1A	6	No				
21	33 KV PT(72.5 KV Class)	6	No				
22	66 KV Isolator 3 phase	6	Set				
23	66 KV PI (72.5 KV class)	15	No				
24	33 KV PI	3	No				
25	Stringing of ACSR conductor/ earth wire with clamp, connectors and hardware etc:						
i)	4" IPS tube	3	Km				
ii)	Quad ACSR moose	1.1	Km				
iii)	Twin ACSR moose	10.3	Km				
iv)	Stringing of overhead shield wires with stranded galvanised steel complete with fixing of strain clamps at the structures.	4	Km				
i)	Unit rate for installation:- 315 MVA 400/220/33 KV X'mer complete with marshalling box, control cabinet with associated cooler control, RTCC	No.	2				

ii)	panel,Nitrogen fire prevention scheme,online DGA monitoring and other				
ii)	DGA monitoring and other				1
ii)	=				
ii)	accessories.				
11)	50 MVAR reactor,	No.	2		
iii)	145 kV,3 MVAR NGR	No.	2		
111)	500 KVA 33/0.4 KV station	110.			
iv)	X'mer	No.	2		
27	Unit rate for erection of circuit breakers:-				
i)	400 KV CBs	No.	12		
ii)	220 KV CBs	No.	5		
iii)	72.5 KV CBs	No.	2		
28	Unit rate for erection of isolators with insulators, With & Without earth switch, piping, alignment of contacts & checking of operation etc.				
i)	400 KV Isolators 3 phase with single Earth switc	Set	24		
ii)	400 KV Isolators 3 phase with double Earth switch	Set	4		
iii)	220 KV Isolators 3 phase with Earth switch	Set	2		
vi)	220 KV Isolators 3 phase without Earth switch	Set	16		
v)	72.5 KV Isolators 3 phase without Earth switch	Set	6		
29	Erection of Current Xmer & fixing of junction box including all accessories & making all connections etc.				
i)	400 KV CTs	No.	36		
ii)	220 KV CTs	No.	15		
iii)	72.5 KV CTs	No.	12		
1117	Erection of CC/PT/CVT &	110.	12		
30	fixing of junction box including all accessories & making all connections etc.				
i)	400 KV CVT	No.	18		
ii)	220 KV CVT	No.	6		
11)	33 KV PTs(rated for 72.5	110.	U		
iii)	KV class)	No.	6		
iv) [Erection of L.A. & fixing of Leakage Counter including all accessories & making all connections etc.				
v)	400 KV LAs	No.	24		
vi)	220 KV LAs	No.	12		
vii)	39 KV LAs	No.	6		
viii)	120 KV LAs	No.	2		
31	Erection of PI including all	-	•		 •
	accessories & making all				

	connections etc.				
	400 KV Post / Polycon				
i)	Insulators	No.	42		
ii)	220 KV Post Insulators/Polycon Insulators	No.	78		
iii)	72.5 KV Post Insulators/Polycon Insulators.	No.	15		
iv)	33 KV Post insulator	No.	3		
32	Erection of DB, junction box, all accessories & making all connections etc.				
i)	Main AC Distribution Board	lot	1		
ii)	Main DC Distribution Board	lot	1		
iii)	Control & Relay panel for 400 KV X'mer/feeder./reactor	Set	8		
iv)	Control & Relay panel for 400 KV tie bay	Set	4		
v)	Control & Relay panel for 400 KV Busbar Panels	Set	2		
vi)	Control & Relay Panel for 220KV X'mer/Feeder	Set	4		
vii)	Control & Relay Panel for 220KV Bus-Coupler	Set	1		
viii)	Control & Relay Panel for 220KV Busbar (integration in existing and new bus bar protection relay)	Set	2		
ix)	Control & Relay Panel for 33 KV X'mer	Set	2		
x)	Marshalling boxes	lot	1		
33	Erection of other works:-				
i)	220 V DC Station Lead acid Battery Set	Set	2		
ii)	Battery Charger of 220 V DC Battery	Set	2		
iii)	48 V DC Stationary Lead Battery Set	Set	2		
iv)	Battery Charger of 48 V DC Battery	Set	2		
34	Installation of perforated type cable Trays, accessories on cable racks in cable trenches	lot	1		
35	Cable Installations:-				
i)	Laying of all types of cables on racks/ cable rays/ angle support/GI conduit pipes, dressing of cables & all accessories for armoured control cables.	Job	1		
ii)	Cable termination's including fixing of cable double compression type glands, lugs				

	for control/power cables					
	Earthing Installations:					
	Rates for installations					
	including jointing equipment					
26	termination, fixing &					
36	clamping & hardware's such					
	as saddle, clamps, cleats,					
	plugs, nut-bolts washers &					
	welding etc.					
	25mm X 2500mm G.S. rods,					
	earth electrodes directly					
i)	driven in to earth including	no	120			
	excavations as required &					
	welding etc. 40mm X 3000mm G.S. rods,					
	earth electrodes directly					
ii)	driven in to earth including	no	160			
11)	excavations as required &	no	100			
	welding etc.					
<u> </u>	Providing Steel risers			•	 	
	including welding to the earth					
iii)	mat at one end bolting &	lot	1			
	welding to the structures at					
	the other end.					
	Providing earth mat of 40 mm					
:)	MS rod duly buried in earth	matan	40500			
iv)	min 600 mm depth with welding complete as per	meter	40300			
	tender specification.					
	Earthing pits as per tender					
v)	specification					
	with 4 pipe	no	9			
37	Yard Lighting:-					
	Erection of Tubular Lighting	no				
i)	High Mast for yard lighting &		10			
	fitting of fixtures					
::\	Erection of tubular pole	no	30			
ii)	structures for yard lighting & fitting of fixtures		30			
	Installations of light fixtures					
	on gantry columns, supply					
iii)	connections to the light fitting	Job	1			
,	from nearest supply board in					
	the yard etc.					
38	GPS time synchronizing	Set	1			
30	equipment with VDU	501	1		 	
	Automatic Data logging					
	System of energy meters					
39	integration of (complete new	No.	1			
	400/220 KV SS and existing 220/132 KV SS) in new					
	control room building					
40	DG set complete	No.	1			
41	Fire fighting system	Set	1			

42	Substation Automation System (complete new 400/220 KV SS and existing 220/132 KV SS) in new control room building	Set	1		
43	Visual monitoring system integration of (complete new 400/220 KV SS and existing 220/132 KV SS) in new control room building	job	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.

PRICE BID ANNEXURE – D-2 TESTING & COMMISSIONING CHARGES FOR 400/220 KV SUB-STATION AT DHARDEHI (BILASPUR)

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		3	4	5	6	7	8
· · · · · · · · · · · · · · · · · · ·	SWITCH YARD EQUIPMENTS:			Ī		•	1
1	400/220/33 KV, 315 MVA, 3-φ, Power Transformer complete	No.	2				
2	400 KV SF6 breaker	No.	12				
3	400 KV isolator with single earth switch	Set	24				
4	400 KV isolator with double earth switch	Set	4				
5	400 KV current transformer	No.	36				
6	400 KV CVT	No.	18				
7	400 KV,50 MVAR Reactor	No.	2				
8	400KV LA	No.	24				
9	220 KV SF6 breaker	No.	5				
10	220 KV isolator with earth switch 3 phase	Set	2				
11	220 KV isolator without earth switch 3 phase	Set	16				
12	220 KV current transformer	No.	15				
13	220 KV CVT	No.	6				
14	220KV LA	No.	12				
15	145 KV 3 MVAR NGR for reactor	No.	2				
16	120 KV LA for NGR	No.	2				
17	33/0.4 KV, 500 KVA, dyn11, Station Transformer (72.5 KV class), Delta / Star	No.	2				
18	66 KV VCB's complete	No.	2				
19	33 KV Potential Xmer (rated for 72.5 KV class)	No.	6				
20	33 KV Current Transformers	No.	12				
21	39 KV LAs	No.	6				
22	66 KV Isolators Three Phase with support Insulators	Set	6				
23	415 V, Secondary Out Door Marshalling Box with MCCBs for stn. Xmer.	No.	2				
<u>(B)</u>	CONTROL ROOM EQUIPMENTS	<u>5:</u>	•				
1	400 KV control & relay panel for 315 MVA X'mer	Set	2				
2	400 KV control & relay panel for feeders	Set	2				
3	400 KV control & relay panel for Shunt reactor	Set	2				
4	400 KV control & relay panel for	Set	4				

	tie bay			 			
5	400 KV Bus bar protection panel	Set	2				
6	220 KV control & relay panel for 315 MVA X'mer	Set	2				
7	220 KV control & relay panel for 220 KV feeders	Set	2				
8	220 KV control and relay panel for BUS coupler	Set	1				
<mark>9</mark>	220 KV Bus bar protection panel (integration in existing and new bus bar protection relay)	Set	2				
10	33 KV Control & Relay Panel for 33KV Tertiary/Station Transformer	Set	2				
11	220V, 600Ah, Battery Set (110 Cells)	Set	2				
12	48 V, 600Ah, Battery Set (24 Cells)	Set	2				
13	60A,220V, Battery Charger	Set	2				
14	60A,48V, Battery Charger	Set	2				
15	ACDB	Set	1				
16	DCDB	Set	2				
17	GPS time synchronising equipment	No.	1				
18	Automatic data logging system for energy meters complete integration of (new 400/220 KV SS and existing 220/132 KV SS) in new control room building.	No.	1				
19	Fire fighting system complete	No.	1				
20	Substation Automation System (complete new 400/220 KV SS and existing 220/132 KV SS) in new control room building	No.	1				
21	DG set complete	No.	1				
22	Visual monitoring system complete integration of (new 400/220 KV SS and existing 220/132 KV SS) in new control room building.	No.	1				
	TOTAL ANNEXURE D-2			 			
	1	i	i		.4	.4	

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.

SECTION-IV

Annexures,
Schedules

&

Forms

ANNEXURE-A-1

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		SIGNATURE OF BIDDER
Place		NAME
1 1000		DESIGNATION
		(SEAL)
		(~)

ANNEXURE – A-2 DECLARATION FORM

Tender specification No. TR-21/02

	То,	
	Sir,	
1.	therein. I/We the undersigned hereby offer complete in all respect as per the specification in the attached contract Annexure – of price	together with tender conditions referred to to execute the work contract covered therein on and general conditions, at the rates entered es in the tender. Our offer is valid upto 180 e prices, which are on firm basis, will remain
2.	I/We hereby undertake to have the works tender.	completed within the time specified in the
3.	I/We certify to have purchased a copy of the and this has been acknowledged by you	Specification by remitting cash demand draft in your letter no dtd.
4. In the event of work order being decided in my/our favour, I/We ag Guarantee in the manner acceptable to CSPTCL and for the sum as provided in the General conditions of contract (Section-II) of this days of issue of work order, failing which I/We clearly understand twill be liable to be withdrawn by CSPTCL.		CCL and for the sum as applicable to me/us as act (Section-II) of this specification within 30
	Signed this day of2021.	Yours faithfully,
	Date	SIGNATURE OF BIDDER
	Place	NAME
		DESIGNATION
		(SEAL)
	(This form should be duly filled up by the bid of tender.)	lder & submitted along with the original copy

ANNEXURE – A-3 QUESTIONNAIRE

TENDER SPECIFICATION TR-21/02 FOR CONSTRUCTION OF 400/220 KV SUB-STATIONS AT DHARDEHI (BILASPUR) 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.**

"Bidders to note this to avoid rejection of their bid": 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.

		T
1.	Name and address of tenderer.	
	Telephone & fax No.	
2.	Mention GST registration number	
3.	Whether quoted as a sole bidder or JV / consortium	
4.	If JV/ consortium, name of	
	Lead partner	
	Other partner	
5.	i. Whether you are State or Central Govt. Undertaking/unit with 100%	Yes / No
	Govt. share.	
	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.)	
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-25) is enclosed.	Yes/No
9.	Whether the offer is valid for 180 days from the date of opening of	Yes / No
	commercial/technical bid	
10	For all equipments & accessories, the price shall be FIRM (except for	Yes / No
	equipments/structures specified in clause 36 (section-IIA) of GCC of Vol-I	
11	a) Confirm that the Ex works price for all supply items for S/s 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 for S/s 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	Terms of payment – Whether agreeable to CSPTCL's terms or not?	Yes / No
13	Extension order - Whether agreeable to CSPTCL's terms or not?	Yes / No
14	Please confirm that you have noted the responsibility for payment of taxes as stipulated in Section-I, Vol-I.	Yes / No
15	Schedule date of completion of work (30 months) – Whether agreeable to CSPTCL's terms	Yes / No
16	Transformer Guarantee Period – Whether agreeable to CSPTCL's terms	Yes / No
17	Equipment/materials Guarantee Period – Whether agreeable to CSPTCL's terms	Yes / No
18	Liquidated damages— Whether agreeable to CSPTCL's terms	Yes / No
19	Whether agreed to guarantee/extended guarantee period clause	Yes / No
20	Whether agreeable to submit 10% BG against SD as per clause-15 (section-IIA) of GCC of Vol-I	Yes / No
21	Whether agreeable to submit BG against Performance guarantee for 5% of the contract 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	Yes / No
22	Whether agree to Technical Specifications & drawings as mentioned in Vol-II.	Yes / No
23	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:	Enclose d or not. If Yes mention Page No.
24	Performance certificate for successful commissioning & satisfactory operation of above mentioned Sub-station 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(s) issuing utility.	Enclose d or not. If Yes mention Page No.
25	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:-	
A	Turn over Details (Annexure A-6) (with Self attested copies of profit and loss account statement of the balance sheet by authorised signatory of the balance sheets for last 5 FY i.e 2015-16 to 2019-20)	Yes/No
В	Net worth details (Annexure A-6) (with Self attested copies by authorised signatory of the balance sheets for last 3 yrs)	Yes/No
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) (Annexure A-7) for Sole bidder/Lead Partner as well as other Partner of JV in original	Yes/No
D	Cash flow requirement (Annexure A-13)	Yes/No
	Can Ito i Toquitomone (Ammeratio 12 10)	1 00/110

Е	Whather contificate of CA (Appeyure A 26) for Sole hidder/I or	ad Dortner as wall	Yes/No		
E	Whether certificate of CA (Annexure A-26) for Sole bidder/Lead Partner as well as other Partner of JV in original have been furnished.				
26	Whether the declaration (Annexure A-27) by Sole bidder/Lea	d Partner as well	Yes/No		
20	as other Partner of JV Separately have been furnished.				
27	For the E bidding portal excel sheet of price bid annexure an	d signed scanned	Yes/No		
21	copy of price bid annexure is uploaded	a signed seamica	105/110		
28	Whether a copy of Valid 'A' class Electrical Contractor Licer	se issued by CG	Yes/No		
20	anugyapan Mandal/ CG state licensing board or an undertaking	-	103/110		
	clause-4 of Section-I of VolI of tender document have been fu	•			
29	Copy of EPF code number allotted by EPF Commissioner		Yes/No		
30	GUARANTEED LOSSES OF OFFERED POWER TRANS	FORMER: This	105/110		
50	information is mandatory or else the bid shall be considered a		ınd liahl		
	for rejection. The losses for offered transformer should be wit	-			
	for respective losses.	iiii iiie preserioea	range		
	(A)315 MVA, 400/220 KV Power transformer	Range (KW)	Offered		
	i. No Load Loss at 75°C & Normal Tap	81 to 90	Onere		
	-	81 10 90			
	ii. Load loss at rated voltage and rated frequency at 75°C & Normal Tap	427.5 to 475			
	iii. Auxiliary Loss at 75°C & Normal Tap	18 to 20			
	(B) 50MVAR reactor	90 to 100			
31	Please confirm that you have noted and agree to the conditions stipulated in				
	clause 5 of section-I, volume-I & sub-clause 5.2.1 of Section-I of volume II that				
	if the losses of offered power transformers exceeds the permissible limit of				
	respective losses then your bid shall be rejected.				
32	Please also confirm that you have noted & agreed to our requir	ement of liability	Yes/No		
	towards Excess Guaranteed Losses for supply of Power	Transformers as			
	stipulated in clause 5.2.2 of Section-I, Vol-II, that if during	g final testing of			
	power Xmer, the measured losses (individually) exceeds the v	values guaranteed			
	by the bidder then the respective transformer will not be accept	ed.			
33	Whether you agree for inspection by CSPTCL's represe	entative prior to	Yes/No		
	despatch and bear the testing charges for all tests as per IS to	be conducted on			
	samples, drawn by CSPTCL 's representative.				
34	Please confirm that you have noted & agree to submit price ad	justment invoices	Yes/No		
	for supplies, positively within 6 (Six) months from date of supply of equipment/				
	material, whether positive or negative, as stipulated in clause 3	7 (section-IIA) of			
	GCC of Vol-I				
35	Whether testing facilities for carrying out the type, acceptance	and routine tests	Yes/N		
	as per relevant is specification, on the materials offered are a	vailable with the			
	manufacturer. If so, please furnish the list of testing machi	nes and relevant			
	details.				
36	Whether details of departures/ deviation from specification have	ve been furnished	Yes/No		
	in the respective schedule.				
	1				
37	Whether details of technical manpower of head office and f	field organisation	Yes/No		

Whether agreeable to arrange for storage cum erection insurance of substation	Yes/No
equipments/materials as per relevant clause of the specification.	
Whether agreeable to bear the cost of any octroi, duty of levy on materials	Yes/No
provided by the contractor such as metal, sand etc.	
Please indicate if use of private/forest/canal service of roads for transport of	Yes/No
materials and constructional personnel if required, then the charges, if any,	
levied by the concerned authorities will be borne by you, without any extra cost	
to the CSPTCL.	
Have you furnished the power of attorney in respect of the person signing the	Yes/No
Whether submitted Pre - contract Integrity pact with confirmation that no	Yes/ No
addition/ 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.	
Whether agree to supply all the equipments and materials as per our tender	Yes/ No
specification 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.	
Certification (Annexure-A-28) by the Bidder as per order no. F.No.6/18/2019-	Yes/ No
PPD dated 23/07/2020 read with amended order No.18/37/2020-PPD	
Dtd.08.02.2021issued by Public Procurement Division, Department of	
Expenditure, Ministry of Finance, Government of India (DoE Order)	
	equipments/materials as per relevant clause of the specification. Whether agreeable to bear the cost of any octroi, duty of levy on materials provided by the contractor such as metal, sand etc. Please indicate if use of private/forest/canal service of roads for transport of materials and constructional personnel if required, then the charges, if any, levied by the concerned authorities will be borne by you, without any extra cost to the CSPTCL. Have you furnished the power of attorney in respect of the person signing the tender on behalf of the bidder? Whether submitted Pre – contract Integrity pact with confirmation that no addition/ 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. Whether agree to supply all the equipments and materials as per our tender specification 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. Certification (Annexure-A-28) by the Bidder as per order no. F.No.6/18/2019-PPD dated 23/07/2020 read with amended order No.18/37/2020-PPD Dtd.08.02.2021issued by Public Procurement Division, Department of

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 SIGNATURE OF BIDDER
Place NAME
DESIGNATION
(SEAL)

1)

2)

3)

ANNEXURE-A-4UNDERTAKING FOR PERSONNEL CAPABILITIES

S1.	Name of person	GERIAL POSITION Educational/Tec	Year of	Details of Licence
No ·	with designation	h. Qualifications	experience	Details of Electice
ERS	ONNEL IN SUPE	RVISORY POSIT	1	
Sl. No	Name of person with designation	Educational/Tec h. Qualifications	Year of experience	Details of Licence
ERSC	ONNEL IN WORK	MEN CATEGOR	Y	
SL No	Name of person with designation	Educational/Tec h. Qualifications	Year of experience	Details of Licence

ANNEXURE – A-5 UNDERTAKING FOR EQUIPMENT CAPABILITIES

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

I/WE (Designation) o	f (Name of bidder) hereby undertake
that we have adequate tools & plants,	financial & technical resources and infrastuctures
backed with qualified agencies to ex	ecute the work of construction of EHV Sub-station
properly and expediciously within the	specified time frame.
Date	SIGNATURE OF BIDDER
Place	NAME
	DESIGNATION
	(SEAL)

ANNEXURE – A-6 FINANCIAL CAPABILITIES

"Certificate issued by Chartered Accountant"

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

(As on a date not older than the date of issue 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 on2021 (This date should not be older than the date of issue 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		

Auditaed figures of Annual Accounts as verified by CA:

Financial information	Actual pre	evious thre	e years
in Rupees	1	2	3
 Total assets Current assets Total liabilities Current liabilities Profit before taxes 			

Attach audited financial statements for the last five years.

Date SIGNATURE OF CHARTERED

Place ACCOUNTANT

UDIN No. (SEAL)

ANNEXURE – A-7

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

		ith our Bank have been at which the extent of utilize	•	• •
Sl. No.	Type of Facility	Sanctioned Limit as on Date	Utilisation as on Date	Unutilized limit / Balance as on Date
his le	tter is issued at the requ	nest of M/s.		
			Name of Ba	ank
			Name of Authorise Signatory	ed
			Designation	
			Phone No	
			E mail ID	
			Telex/Fax	

ANNEXURE – A-8 EXPERIENCE RECORD

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

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

Date SIGNATURE OF BIDDER
Place NAME
DESIGNATION
(SEAL)

ANNEXURE – A-9

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	SIGNATURE OF BIDDER
Place	NAME
	DESIGNATION
	(SEAL)

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

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 SIGNATURE OF BIDDER
Place NAME
DESIGNATION
(SEAL)

ANNEXURE – A-11 COMPLETION SCHEDULE FOR SUB-STATION

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:

S.No	S.No DESCRIPTION OF WORK .		Period in months from date of handing over of site			
		Commen	Completion	From	То	
		cement				
FOR	EHV SUB-STATION					
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 equipments & structure, etc.					
3.	Constn.of Control room building & other 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, SAS,ADLS, etc.					
7.	Erection of structures/equipments in switch yard					
8.	Erection of control room equipments etc.					
9.	Testing & Commissioning of equipments etc.					

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

	SIGNATURE OF BIDDER
Place	NAME
	DESIGNATION
	(SEAL)

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	SIGNATURE OF BIDDER
Place	NAME
	DESIGNATION
	(SEAL)

ANNEXURE – A -13 CASH FLOW REQUIREMENT

A. FINANCIAL RESOURCES

(Period starting from 6th month from the date of issued of NIT up to schedule completion period of the proposed work)

[To be submitted by the bideer (Sole bidder/each partner of joint venture separately)]

Bidders and each member of JV shall separately provide this information of financing likely available during the aforesaid period such as liquid assets, unencumbered real assets, lines of credit except non funded facility and other financial means, available to meet the total construction cash flow demands of the instant tender/work and his current works commitment for other contracts in the following format:- (Prequalifying requirements).

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

B. CURRENT CONTRACT COMMITMENTS/ WORKS IN PROGRESS

(As on date of issue of NIT)

[To be submitted by the bidder (sole bidder/each members of Joint Venture separately)]

Bidders and each member of JV shall separately provide this information in following format for their all current commitments related to all contracts in hand – that have been awarded (excluding this instant tender), or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which for full completion certificate has yet to be issued as on date of issue of NIT:-

No.	Detail	Details of	Details	Value of	Schedule	Value of	Estimated	Expected value of
	work	contract	of order	contract	date of	balance	completion	work to be carried out
	like	order /LOI	placing	placed	completion	work [In	date	against column 7
	Name,	issued	authority	[In lakh	as per	Lakh Rs]		during the period
	place,	(with	Contact	Rs]	contract			starting from 6 th month
	etc.	No/date)	no.					of issue of this NIT till
			Address,					completion period of
			Tel, Fax					the instant tender/work
			etc					[In Rs Lakh]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.								
2.								
3.								
4.								
5.								

Note: no work in hand shall be excluded from this list – even if completion of work is expected within 6 month from the date of issue of this NIT.

Declaration by the bidder (in case of JV it shall be submitted by each member separately): This is to undertake that no work – in hand, has been left. All work/awarded/contracts have been covered in above statement to the best of my knowledge. We/I understand that in case, the above information is found to be false/fake/misleading, the bid will be disqualified.

Note: The net availability (A-B) should not be less than Rs. 13.23 Cr. In case of JV/consortium, the net availability will be computed collectively for both consortium partner.

Signature of Bidder:

Name:

Designation: (Seal)

Date: Place:

ANNEXURE – A -14

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
executor Transmi 1956, (h	or which expression shall where the context so admits, be deemed to include his heirs, s, administrators and representatives) of the one part, and the Chhattisgarh State Power ssion Company Limited, Raipur being the Company constituted under Companies Act, ereinafter called the CSPTCL which expression shall, where the context so admits, be to include its successors in office and permitted assigns) of the other part.
	AS in accordance with a Tender no dtd issued by Executive (P&P) of the CSPTCL, the Contractor submitted his tender dated for
Constru	ction of 400/220 KV sub-station at DHARDEHI (BILASPUR)
to in the covering and is for the conform part	e works on turnkey basis more particularly described, mentioned, enumerated or referred e general conditions, specifications, schedules, drawings etc. forming part of tender, letters, schedule of prices and further correspondence, a copy of which is hereto annexed or purposes of identification signed by the contractor on behalf ontractor and Executive Director (P&P) of CSPTCL and all of which shall be deemed to to of this agreement as though separately set out herein and are included in the expression et" herein used (herein after referred to as the said works).
work Or basis for	HEREAS the CSPTCL has accepted the tender of the Contractor vide following separate ders which have been placed by CSPTCL for construction of aforesaid works on turnkey the total net price of upon the terms and subject to ition hereinafter mentioned.
NOW T	HEREFORE THIS AGREEMENT WITNESSES AND IT IS hereby agreed as follows:
. Th	e 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.
	within the time specified in and in accordance with the terms and conditions specified in the CSPTCL aforesaid Work Orders.
04/ the sub for Ba	e contractor shall commence the works described in the Notice Inviting Tender No. 02-NIT/TR, dated, namely, the construction of 400/220 KV Sub-station and reafter execute the works in parallel in accordance with the completion schedule omitted in the format set out in Annexure A-11 of Section IV (Annexures, Schedules & ms), Volume I of the Tender Specifications No. TR-21/02, read with the PERT Network / Chart submitted in accordance with clause 3.2 of the General Conditions of Contract for o-station Work [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.

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-21/02, 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 Arbitration and Conciliation Act 1996, the third Arbitrator so appointed shall act as the Presiding 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- 15 PROFORMA FOR BANK GUARANTEE TOWARDS SECURITY DEPOSIT

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

Bank Guarantee No
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 or
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
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 on
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.
The liability under this guarantee is restricted to Rs (in words)
only. This guarantee shall remain in force unti
under this Bank Guarantee by the CSPTCL to the Bank within six months from that date the
rights of the Chhattisgarh State Transmission Company Ltd. Under this guarantee shall be
forfeited and Bank shall be relieved and discharged from all liabilities there under.
WITNESSES:- SIGNATURES
Authorized Signatories of Bank
Signed
for Bank

ANNEXURE – A- 16 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
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
for due and faithful performance required from M/s hereby agrees 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 Reinur (A Suggessor Company of CSER Reinur). The proceeds / enceshment of this Bank
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. The liability under this guarantee is restricted to Ps. (in words)
The liability under this guarantee is restricted to Rs (in words) only. This guarantee shall remain in force until
this Bank Guarantee by the CSPTCL to the Bank within six months from that date the rights of the
Chhattisgarh State Transmission Company Ltd. Under this guarantee shall be forfeited and Bank
shall be relieved and discharged from all liabilities there under.
WITNESSES:- SIGNATURES
Authorized Signatories of Bank
1
<u></u>

ANNEXURE – A- 17 PROFORMA FOR BANK GUARANTEE FOR LOSS/DAMAGE TO CSPTCL

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).

	consideration of the Chnattisgarn State Power Transmission Company Limited, (herein after liled "CSPTCL") having agreed to exempt Ms erein after called "the said Contractors") from the demand under the terms and conditions of an
ag	greement No Dated made between And for (herein after called "the said
ag	greement") of security deposit for satisfactory performance of materials (as detailed in the said greement) and for the due fulfilment by the said Contractor(s) of the terms and conditions ontained in the said agreement, on production of a Bank Guarantee for Rs
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 Executive Director (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).

		Chhattisgarh State Power Transmission of erstwhile CSEB Raipur).	Company Limited, Raipur (A
8.		(indicate the name of the ee during its currency except with the pro-	
Dat	ed, the days of _	·	
WI	ΓNESS (SIGNATURE	WITH NAME & ADDRESS)	
1.			
2.			
			For
			(Indicate name of Bank)

TR-21/02

PROFORMA FOR INDEMNITY BOND

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

By (here permits permi	S INDEMNITY BOND is made this
roometcdtd.	EREAS EMPLOYER has awarded to the 'Contractor' a Contract forsupply of galvanising steel cture for equipments, gantry, bus and lighting towers etc. for supply of all switchyard & control nequipments with recommended spares, and supply of testing equipments, T&P and furniture and complete erection/commissioning thereof for sub-station vide Order No
'Con	WHEREAS by virtue of Clause No of tender specification No, the ntractor' is required to execute an Indemnity Bond in favour of Employer for the Material ded over to it by Employer for the purpose of performance of the Contract/Erection portion of Contract (hereinafter called the 'Materials').
Nov	THEREFORE, This Indemnity Bond witnessed as follows:
1.	That in consideration of various Material like Galvanised steel structures, switchyard and control room equipments, testing equipments etc. as mentioned in the Supply Order of S/s & line No
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	g:
1. 1. Signature	
2. Name	Name
3. Address	Designation
2. 1. Signature	Authorized representative (Common Seal)
3. Address	
	(In case of Company)

Indemnity Bonds are 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 specifically for this Contract or a Photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity Bond.

2)

ANNEXURE – A-19

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
	NoDate
C.S.	Power Trasmission Company Ltd.
G 1	
Sub:	- The Extension of Bank Guarantee Nofor the
	RsFavouring yourself expiring on
i.	At the request of our client M/swe hereby
	extend our Guarantee Nodtdgiven on their behalf for the
	further period fromto
ii.	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.
Witr	ness:- Signed for Bank
VV 1U1	icss Signed for Bank
1)	
,	

ANNEXURE -A-20

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 ofstipulated 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.
- 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	
II	

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 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-21

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)

(10 be executed on 110h shareful Stamp 1 aper	worm Rs. 100.00 a Rs.1.00 revenue siamps
know all Men by These Presents The hereunder	have formed a Joint Venture under the laws r Registered Office(s)/Head Office(s) at he 'Joint Venture' which expression shall unless lade its successors, administrators and assigns) heing the "Lead Partner" do
of the "Joint Venture". ii) To negotiate with the CSPTCL the terms and of	th the CSPTCL for and on behalf of the "Joint lated to the above.
It is clearly understood that the Lead Partner shall of any breach of contract by any of the joint vent contract, it will be the sole discretion of CSPTCL to to terminate the total contract. It is expressly understood that this Power of Attorn completion of the Maintenance Period in terms of the The Joint Venture hereby agrees and undertakes to Attorney/Authorized Representatives/Partner in-chand signs the Contract with the CSPTCL and/or privirtue of this Power of Attorney and the same shall	ure/consortium partners during execution of the partner to complete the work or ey shall remain valid binding and irrevocable till the Contract. To ratify and confirm all the whatsoever the said targe/Lead Partner quotes in the bid, negotiates roposes to act on behalf of the Joint Venture by
IN WITNESS THEREOF the Partners Constitution these presents on this day of	
For and on behalf of the Partners of Joint Venture The Common Seal of the above Partners of the Join	nt Venture:
The Common Seal has been affixed there unto in th WITNESS	e presence of:
1. Signature Name Designation Occupation	2. Signature Name Designation 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-22 PRE-CONTRACT INTEGRITY PACT

(To be executed on non judicial stamp paper worth Rs 300/-)

1. **GENERAL**

1.1	This p	re-bid contra	act Agreemen	t (hereina	fter calle	ed the In	tegrity Pact) is made on	day of
	the	month	20,	betwe	en	the	CSPTCL	acting	through
	Shri			ED/CE	(P&P)	(hereina	after called	the "BUYER	R", which
	expres	sion shall m	ean and inclu	de, unless	the con	text othe	erwise requi	res, his success	sors in the
	office	and assig	gns) and th	ne First	Party,	propos	ses to pr	ocure (name	of the
	Stores	/Equipment/	Work/Service	and M/	s			repre	sented by
	Shri					Chief Ex	xecutive Of	ficer (hereinaf	ter called
	the "B	IDDER/Sell	er", which ex	pression s	shall me	an and i	nclude, unle	ess the context	otherwise
	require	es, his succe	essors on peri	mitted ass	igns) ar	nd the S	econd Party	, is willing to	offer/has
	offered	1							

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. OBJECTIVES

- 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. COMMITMENTS OF BIDDERS

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

- 4.1. The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the 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. PREVIOUS TRANSGRESSION

5.1. The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.

5.2. If the BIDDER makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

EARNEST MONEY (SECURITY DEPOSIT) 6.

- Every BIDDER while submitting commercial bid, shall deposit an amount as specified in RFP 6.1. 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. **SANCTIONS FOR VIOLATIONS**

- 7.1. Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the BUYER to take all or any one of the following actions, wherever required:-
 - To immediately call off the pre contract negotiations without assigning any reason or (i) 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.
 - To immediately cancel the contract, if already signed, without giving any (iii) compensation to the BIDDER.
 - To recover all sum already paid by the BUYER, and in case of the Indian BIDDER (iv) 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.
 - To encash the advance bank guarantee and performance bond/warranty bond, if (v) furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.
 - To cancel all or any other contracts with the BIDDER and the BIDDER shall be liable (vi) 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 dependant upon Government servant.

- (xi) The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER, and if he does so, the BUYER shall be entitled forthwith to rescind the contract and all other contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- 7.2.1. 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. INDEPENDENT MONITORS

- 8.1. The BUYER will appoint Independent Monitors (hereinafter referred to as Monitors) for this Pact.
- 8.2. The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 8.3. The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 8.4. Both the parties accept that the Monitors have the right to access all the documents relating to the project/ procurement, including minutes of meetings. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.
- 8.5. As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.
- 8.6. The Monitor will 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.

LAW AND PLACE OF JURISDICTION 10.

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

11. OTHER LEGAL ACTIONS

2).....

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. **VALIDITY**

13.

- 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.
- 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.
- **BUYER BIDDER** Name of Officer CHIEF EXECUTIVE OFFICER Destination Department/PSU Witness Witness 1)..... 1) 2)

The parties hereby sign this integrity Pact aton......

ANNEXURE- A- 23 INSPECTION PLAN FOR EQUIPMENTS

No.	Particular	CSPTCL Inspection	Contractor Inspection
1.	315MVA, 400/220/33 KV, Xmer with Oil & Accessories	Yes	Yes
2.	50 MVAR shunt reactor	Yes	Yes
3.	3 MVAR NGR	Yes	Yes
4.	400 KV SF ₆ circuit breaker	Yes	Yes
5.	400 KV Current Transformer	Yes	Yes
6.	400 KV Capacitance voltage transformer	Yes	Yes
7.	Lightning Arrestor 390KV	Yes	
8.	Visual Monitoring System	Yes	
9.	LMU (phase to phase coupling)	Yes	
10.	EPAX	Yes	
11.	400 KV Isolators	Yes	
12.	400 KV Control and relay panel	Yes	Yes
13.	400 KV Bus Bar protection panel	Yes	Yes
14.	Solid core Insulators & Post insulators for bus bars & isolators etc. on 400 KV side.	Yes	
15.	220 KV SF ₆ circuit breaker with structure complete	Yes	
16.	Lightning Arrestor 198 KV	Yes	
17.	Capacitance voltage transformer	Yes	
18.	220 KV Isolator (3-φ) with earth switch	Yes	
19.	220 KV Isolator (3-φ) without earth switch	Yes	
20.	220 KV Control and relay panel for 220 KV feeders, , Bus Tie, & busbar	Yes	
21.	Solid core Insulators & Post insulators for bus bars & isolators etc. on 220 KV side		Yes
22.	220 KV SF ₆ circuit breaker with structure complete	Yes	
23.	Lightning Arrestor 120 KV	Yes	
24.	72.5 KV Circuit Breaker with Structure	Yes	
25.	72.5 KV Class Current Transformer	Yes	
26.	33 KV/110 V (72.5 KV Class) Potential X'mer	Yes	
27.	39 KV / 30 KV LA for tertiary winding	Yes	
28.	Isolator with insulators Without earth switch,	Yes	
29.	Solid core Insulator	Yes	
30.	33 /0.4 KV, 500 KVA Stn. Xmer (with Oil & Accessories)	Yes	
31.	33 KV control & relay panel for tertiary/station Xmer	Yes	
32.	DG Set	Yes	
	CONDUCTOR, CLAMPS & CONNECTORS		1
33.	MOOSE ACSR Conductor & IPS tube	Yes	
34.	Galvanised Steel Ground Wire 7/3.66 mm	Yes	
35.	Earthing materials	Yes	
	Nuts & Bolts of Assorted Sizes	Yes	
36		1 00	i
36. 37.	Clamps, connectors, Spacers etc.	Yes	

No.	Particular	CSPTCL Inspection	Contractor Inspection
39.	Lighting High Mast	Yes	
40.	Disc Insulators	Yes	
41.	Visual Monitoring System	Yes	
42.	Tension/suspension hardware	Yes	
43.	Fire Fighting Equipment		Yes
44.	Armoured control cable	Yes	
45.	Cable trays		Yes
46.	LT & HT Power Cables	yes	
47.	Testing Equipment	Yes	Yes
48.	PLCC-Cables:-		Yes
	H F (Co-axial cable) cable (125Ω(Ohms))		1 68
49.	Battery: 220 V, 600 A H	Yes	
50.	Battery: 48 V, 600 A H	Yes	
51.	Battery Charger: 220 V, 600 A H	Yes	
52.	Battery Charger: 48 V, 600 A H	Yes	
53.	Illumination fittings & Accessories		Yes
54.	AC /DC Boards & Junction Boxes	Yes	Yes
55.	G.I. Structure	Yes	
56.	Tools & Plant	Yes	
57.	Furniture		Yes
58.	GPS time synchronising equipment	Yes	
59.	Automatic Data Logging System for Energy meter		Yes
60.	SCADA/SAS	Yes	

ANNEXURE -A-24

ILLUSTRATIVE EXAMPLE FOR CAPITALISATION OF LOSSES							
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 315 MVA To	ransformer						
No Load loss (KW) offered	81-90	82	83	80	92	85	84
Load loss (KW) offered	427.5-475	428.5	426.5	434.5	430	480	430
Aux loss (KW) offered	18-20	17	18.2	18.1	18	19	22
Diff No Load loss		1	2	0			
Diff Load loss		1	0	7			
Diff Aux loss		0	0.2	0.1			
Capitalisation for no load loss (Diff lossx 5,08,908.00)		5,08,908	10,17,816	0	Bid non responsive due to	Bid non responsive due to	Bid non responsive due to
Capitalisation for load loss (Diff lossx 2,70,739.00)		2,70,739	0	18,95,173	excessive No load loss	excessive load loss	excessive auxiliary loss
Capitalisation for Aux. loss (Diff lossx 2,03,563.00)		0	40,712.6	20,356			

ANNEXURE A-25 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.	Self-attested copies of audited annual accounts 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	
3.	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	
4.	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	
5.	Cash flow requirement (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV)	Annexure A-	Yes/No	
6.	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	
7.	Certificate issued by Chartered Accountant (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV)	Annexure A- 26	Yes/No	
8.	Declaration by the bidder (To be furnished for Sole bidder/Lead Partner as well as other Partner of JV (Separately).	Annexure A- 27	Yes/No	
9.	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 400 KV substation commissioned & name of order placing utility		Yes/No	
10.	Performance certificate for successful commissioning & satisfactory operation of above mentioned Sub-station 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	
11	For the E bidding portal excel sheet of price bid		Yes/No	

	annexure and signed scanned copy of price bid			
	annexure is uploaded.			
12.	Copy of Valid 'A' class Electrical Contractor			
12.	License issued by CG anugyapanMandal/ CG			
	state licensing board in the name of sole bidder /			
	lead partner of the joint venture/ consortium or			
	an undertaking to submit 'A' class electrical		Yes/No	
	contractor license issued by C.G.		103/110	
	AnugyapanMandal / CG State licensing Board			
	within 30 days after issue of LOA, by the sole			
	bidder or lead partner of the JV/consortium.			
13.	Copy of EPF code number/ EPF registration No.			
13.	allotted by EPF Commissioner in the name of the		Yes/No	
	sole bidder / Lead partner of the JV		105/10	
14.	Pre-contract Integrity pact in prescribed format	Annexure A-		
		22	Yes/No	
15.	Deviation from technical specification/ conditions	Annexure A-9	Yes/No	
16.	Deviation from the commercial condition of	Annexure A-	Yes/No	
	contract	10	I es/No	
17.	Undertaking by the Joint Venture Partners	Annexure A-	Yes/No	
		20	1 65/110	
18.	Power of Attorney for Joint Venture	Annexure A-	Yes/No	
		21	103/110	
19.	Undertaking for Personnel Capabilities			
	(To be furnished for Sole bidder/Lead Partner as	Annexure A-4	Yes/No	
	well as other Partner of JV) (Separately)			
20.	Undertaking for Equipment Capabilities			
	(To be furnished for Sole bidder/Lead Partner as	Annexure A-5	Yes/No	
	well as other Partner of JV (Separately)			
21.	Power of attorney issued to legally authorised		Yes/No	
	signatory			
22	Litigation History of the Bidder	Annexure A-		
	(To be furnished for Sole bidder/Lead Partner as	12	Yes/No	
22	well as other Partner of JV (Separately)			
23	Certification by the Bidder as per order no.			
	F.No.6/18/2019-PPD dated 23/07/2020 read with			
	amended order No.18/37/2020-PPD			
	Dtd.08.02.2021 issued by Public Procurement	Annexure A-	V /NI	
	Division, Department of Expenditure, Ministry of	28	Yes/No	
	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)			

Date SIGNATURE OF BIDDER

Place NAME

DESIGNATION

(SEAL)

ANNEXURE – A-26 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 **30.09.2021** 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.

Date
SIGNATURE OF CHARTERED
ACCOUNTANT

Place
NAME
(SEAL)

ANNEXURE – A-27 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/SE	B/ publ	ic utility as	s on date of is	ssue 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 SIGNATURE OF BIDDER
Place NAME
DESIGNATION
(SEAL)

ANNEXURE-28

Certification by the Bidder as per order no. F.No.6/18/2019-PPD dated 23/07/2020 read with amended order No.18/37/2020-PPD Dtd.08.02.2021 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: Name:	To: Executive Director (Planning & Projects), Chhattisgarh State Power Transmission Co. Ltd. Third Floor, SLDC Building, CSEB Campus Dangania, Raipur (C.G.)-492013
Dear Sir,	
Procurement no.1) dated 23/07/2020 re Financial Rules" and F.No.6/18/2019-PH regarding "Exclusion from Restrictions un	sions of Order no. F.No.6/18/2019-PPD (Order Public egarding "Restriction under Rule 144(xi) of General PD (Order Public Procurement no.2) dated 23/07/2020 nder Rule 144(xi) of the General Financial Rules" issued nent of Expenditure, Ministry of Finance, Government of tred as " DoE Order "] and any subsequent
• 1	e clause regarding restrictions on procurement from a border with India" and on sub-contracting to contractors
	e not from such a country and will not subcontract any from such countries and is eligible to be considered.
which shares a land border with Ind registered with the competent author	our subcontractor/sub vendor is/are from such a country ia, as brought out in the aforementioned orders. We are rity as defined in the Ministry of Finance, Govt. of India alf-attested copy of registration certificate issued by the g with the bid.
Tick $()$ in the box (\square)) as applicable	
• 1	sentation or submission of false/ forged document/ rith as per the provisions of Integrity Pact and/or Bidding procedures.
Date:	Name:
Place:	Designation

SECTION- V

Vendor List

A) LIST OF APPROVED VENDORS FOR 400/220 KV SUBSTATION

	LIST OF APPROVED VENDO	RS FC	OR 400 KV SIDE EQUIPMENT
N	Name of equipment		Name of the vendo
1	315 MVA 400/220/33 KV Power	1	M/s BHEL
	Transformer	2	M/s CGL
		3	M/s TELK Kerala
		4	M/s Areva / Alstom
	Here is a second	5	M/s ABB
	H	6	M/s EMCO
2	Tap changer for Power Transformer	1	M/s BHEL
		2	M/s TELK
		3	M/s Easun MR
		4	M/s MR
3	400 KV Line Reactor / Neutral	1	M/s BHEL
	Grounding	2	M/s CGL
	Reactor	3	M/s TELK
		4	M/s Areva / Alstom
		5	M/s ABB
	400 KV SF6 Gas Circuit Breaker	1	M/s CGL, Nashik
		2	M/s ABB
		3	M/s Areva/Alstom
	H	4	M/s Siemens
,	400 KV Current Transformer	1	M/s CGL
		2	M/s BHEL
		3	M/s ABB
		4	M/s Areva / Alstom
	H	5	M/s Siemens
	Here is a second	6	M/s TELK
j	400 KV CVT	1	M/s CGL
	300 100 100 100 100 100 100 100 100 100	2	M/s BHEL
		3	M/s ABB
	jung di kananananananananananananananananananan	4	M/s Areva / Alstom
7	400 KV Isolators	1	M/s S&S
	In the state of th	2	M/s Hivelm
		3	M/s GR Power, Hyderabad
		4	M/s Siemens
		5	M/s ABB
	In the state of th	6	M/s Areva / Alstom
		7	M/s Sprecher + Schuh
	390 KV Lightning Arrestor	1	M/s CGL
		2	M/s ELPRO
		3	M/s Oblum, Hyderabad
	400 KV Wave Trap	1	M/s BPL
	jung di kacamatan	2	M/s Areva / Alstom
0	400 KV Control & Relay Panel	1	M/s Areva / Alstom
	(without relay)	2	M/s Siemens
	in in the state of	3	M/s ABB
		4	M/s GE

11	Carrier Cabinet for 400 KV	1	M/s ABB
12	Disc Insulators-160 KN/120 KN	1	M/s WS Insulator
		2	M/s BHEL, Jagdishpur
			M/s Aditya / NGK Birla
13	400 KV Post Insulator	1	M/s WS Insulator
		2	M/s BHEL
		3	M/s Aditya / NGK Birla
		4	M/s Modern Insulators
		5	M/s Sarvana Global Energy Ltd.
		6	M/s Insulators & Electricals
			Company
14	Sub-station Hardwares/Clamps &	1	M/s IAC Electrical, Kolkata
	connector	2	M/s Rashtra Udyog
		3	M/s Supreme & Co. Kolkata
		4	M/s EMI Transmission Ltd., Thane
		5	M/s International Trasmission
			Product
		6	M/s Klemmen Engineering
		7	M/s Electro mech & transtech
		8	M/s Tag Corporation, Chennai
		9	M/s Modern Malleable
		10	M/s Burma Electro Corporation
			Jalandhar
		11	M/s Aarpee & Associates
		12	M/s Eritech, Kolkata
		13	M/s Krsna Transmission hardware
			Mfg Ltd., Vadodara

B) LIST OF APPROVED VENDORS FOR 220 KV SIDE EQUIPMENT

SN	Name of equipment		Name of the vendor
1	160MVA Power Transformer 220	1	M/s BHEL
	/132 / 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
		9	M/s Bharat Bijlee Ltd.
2	Tap changer for power transformer	1	M/s BHEL
		2	M/s TELK
		3	M/s Easun MR
		4	M/s MR
		5	M/s CTR
3	245 KV SF6 Gas Circuit Breaker	1	M/s CGL Nasik
		2	M/s Areva / Alstom
		3	M/s Siemens
		4	M/s ABB
		5	M/s BHEL
4	220 KV Current Transformer/	1	M/s CGL
	Potential 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.		M/s CGL
3	220 KV C.V.1.	1 2	M/s ABB
		ļ	
		3	M/s Areva / Alstom
		4	M/s BHEL
	200 1111 1	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
		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/	1	M/s W.S. Insulators
	90KN/ 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
		1	

		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 hardware only)		
Note	o:-				
(i)					
(ii)	The name of manufactures whose performance is found unsatisfactory shall be deleted from vendor list.				

(C) 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 -	1	M/s Areva / Alstom
	Distance (Numerical), Differential &	2	M/s Siemens
	REF (numerical), Bay control Unit, Bus	3	M/s ABB
	bar Protection, Gateway, O/C & E/F, other protective trip and Auxiliary relay,	4	M/s GE
		5	M/s SEL
	SCADA / SAS)	6	Ms Schneider Electric
3	Relays for 66 KV -Distance	1	M/s Areva / Alstom
	(Numerical), differential & REF	2	M/s Siemens
	(numerical), Over Current / Earth Fault, other protective, trip and Auxiliary relays for 66 KV.	3	M/s ABB
		4	M/s GE
		5	M/s SEL
		6	M/s Easun Reyrolle

<u></u>		7	Ms Schneider Electric
1	Ethernet Switch		
4	Ethernet Switch	1 2	M/s Ruggedcom M/s CISCO
		3	M/s Hirschmann
		3 4	M/s Masibus
5	Annunciator Relay	1	M/s Alan
J	Amuniciator Keray	2	M/s Bhrani
		3	M/s Minilec
		4	M/s JVS
6	Time Synchronizing Unit	1	M/s Arbiter
U	Time Synchronizing Omt	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,Satna
/	and Unarmoured)	2	M/s Finolex
	and Onarmoured)	3	M/s Torrent cables.
		4	M/s Fort Gloster
		5 6	M/s Ravin cables, Mumbai M/s KEI Industries
		7	M/s KEC International
		8	M/s Unisef cables Ghaziabad
		9	
		10	M/s Maharaja cables New Delhi M/s RK Electrical Industries
		10	
		12	M/s Balaji Cables M/s Alpha Communication
		13	M/s Alpha Communication M/s Nakoda
		14 15	M/s Capcab India Ltd. M/s Deco Industries
		16	M/s Insucon Cables
		17	M/s Pasondia Cables
		18	M/s Scot Innovation (Ekta Cables)
		19	M/s Dashmesh Cables, Mumbai
		20	M/s Omega
		21	M/s NICCO
		22	M/s Havells India Alwar
		23	M/s Fine cab wires and cables ltd.,
		23	Secundrabad
		24	M/s CMI Limited, New Delhi
8	Fibre Optic Cables	1	M/s Treston
U	Tiole Opile Cuoles	2	M/s Fine Core
		3	M/s AMP
		4	M/s Birla Furukawa
		5	M/s Sterlite Technologies Ltd.
9	EHV Cables	1	M/s Poly cab
	Lii Cuoico	2	M/s Havells
		3	M/s KEI
		4	M/s Universal
10	Capacitor Bank	1	M/s Shreem Electrical Ltd.
10	Cupacitor Bank	2	M/s ABB
		3	M/s BHEL
		4	M/s Mehar
		5	M/s Havells
<u> </u>		J	171/ 0 1107 (110

			M/ II ' 1011 I-10
		6	M/s Universal Cables Ltd, Satna
11	Dottowy Cot	7	M/s Madhav Capacitors, Pune
11	Battery Set	1	M/s Exide Industries Ltd., Kolkata
		2	M/s AMCO Batteries Ltd, Chennai
			M/s AmaraRaja Batteries Ltd,Tirupati
		4	M/s HBL Nife, Hyderabad
		5	M/s BUI Pvt Ltd, Pune
12	Detterm change	6	M/s Kirloskar Batteries, Bangalore M/s Chhabi
12	Battery charger	1 2	M/s Dubas
		3	M/s HBL Nife, Hyderabad
		4	M/s Amara Raja
		4 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
		9 10	M/s Redtron
13	High Mast & its Luminaries	10	M/s Bajaj
14	Light Fixtures/fan & Exhaust fan	1	M/s CGL
17	Light Pattures/fail & Exhaust fail	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
ı		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	2	M/s Vijay Transmission
	etc	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/a D D Janet Urla Dainur
			M/s. R.R. Ispat, Urla, 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
20	Earth whe (7/3.00 mm)	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
21	ACSK Woose conductor	2	M/s North East conductor
		3	M/s Unity Conductors
		4	
		5	M/s Galaxy Transmission Ind. Sangali
		ļ	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
		13	M/s KJV Alloys Conductor Ltd. Nagpur
	A COD 7.1	14	M/s Rajputana cables and conductor Korba
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
		16	M/s KJV Alloys Conductor Ltd. Nagpur
23	Window A.C.	1	M/s DAIKIN (5 star rating)
24		2	M/s HITACHI (5 star rating)
	Visual Monitoring system		, J
25	• •	1	M/s Sony
	1) Camera		
		1	M/s Dell
26		2	M/s HP
26	Servers/PCs	3	M/s Sony
		4	M/s Samsung
27	72.5 KV Circuit Breaker	1	M/s CGL
-	, 2.0 IX Circuit Dicunci	2	M/s ABB

		3	M/s Areva / Alstom
		4	M/s Siemens
		5	M/s BHEL
	1) 72.5 KV C.T.	1	M/s CGL
	2) 33 KV P.T.(72.5 KV class)	2	M/s BHEL
28		3	M/s SIEMENS
		4	M/s ALSTOM
		5	M/s ABB
29	72.5 K.V Isolators		S&S / HIVLM / GR Power/ SIEMENS
30	Other Equipments / Components		Reputed Make as approved by CSPTCL.

LIST OF VENDERS FOR MAJOR ITEMS OF TRANSFORMER

S. No.	Name of Item	Supplier
1.	CRGO	M/s. Nippon steel corporation, Japan
		M/s. Kawasaki Corp., Japan (M/s JFE, Japan)
		M/s. Armco, USA,
		M/s. Covefi, France
		M/s. Salzgittar, Germany
		M/s. S Usinor, France
		M/s Transfer, France
		M/s Mitsubishi, Japan.
		M/s AST Terni, Italy
		M/s. EBG India Pvt Limited, (Indian Agent) for
		M/s GELSE NKIRCHEN, Germany
		M/s British Steel Corporation, UK
		M/s Thyseen Krupp Group of Companies
		M/s. POSCO, Korea
		M/s A.K.Steel USA
2 (a)	Winding conductor	M/s Invex Filli Isolati Speciali s.p.a. Italy
		M/s. Asta
		M/s. Smit Draad, Holland
		M/s. Incab Industries, Jamshedpur
		M/s. Sterlite Industries, Mumbai
		M/s. Bhandari Conductor, Mumbai/ Mandideep.
		M/s. Shakti Insulated Wires, Mumbai
		M/s KSH International Pvt Limited, Taloja
		M/s Delta-Trans Conductor, Mumbai
		M/s Vijay Electricals, Hyderabad
		M/s RIMA Transformers & Conductors (P) Ltd, Bangalore.
		M/s Lacroix and Kress (GMBH) Germany
		M/s Pirellicavi Italy
		M/s Shree Cable & Conductors
		M/s. Hindalco
		M/s. Chandra Metals
		M/s. BCPL Conductors
(b)	CTC Conductor	M/s Sam Dong Korea
		M/s Invex Filli Isolati Speciali s.p.a. Italy
		M/s Loc Roix AND KRESS – Germany
		M/s. KSH International (P) Ltd.
		M/s. Chandra Metals
3.	Precompressed press	M/s. H. Weidmann, Switzerland

S. No.	Name of Item	Supplier
	Board & press Board	M/s. Fige Holms Brruk, Swedan
	components	M/s. Senapathy Whiteley, Banglore
		M/s. Raman Board, Mysore
4.	Insulating Material	M/s. Dupont, USA
		M/s. Senapathy Whiteley, Banglore
		M/s. H. Weidmann, Switzerland
		M/s. Munksio
		M/s Amotfors, Sweden
		M/s Krammerer
5.	Air Cell	M/s PRONL, France,
		M/s. Swastik
		M/s. Unirub
		M/s. Rubber Products
		M/s Sukrut Udyog
		M/s Nu-Cork products (P) Ltd.
6.	Gaskets	M/s. Talbros, Faridabad
		M/s. Cortica, Chennai
		M/s. Packing & Jointing, Chennai
		M/s Indian Rubber Products, Haridwar
		M/s Bombay Oil Seal Mfg. Mumbai
		M/s MGM Rubber Kolkata
		M/s Bharat Corrub Industries, Vadodara.
		M/s Indian work Industries
		M/s Works Product Pvt Ltd
7.	OIP Condensor	M/s. BHEL
	bushing	M/s. CGL
	0 4 10 1111 12	M/s. TELK
		M/s ASEA-MICAFIL
		M/s. Trench
		M/s. Alstom (earlier M/s. Areva)
		M/s. Vijai Electricals Ltd.
		M/s ABB
8.	Terminal Connector	M/s. Best & Crompton, Chennai
0.	Terminal Connector	M/s. PeeVee Engg., Bangalore
		M/s. Milind Engg., Mumbai
		M/s. Nootan, Baroda
		M/s Utsav, Baroda
		M/s Vinayak and Co., Mumbai
		M/s Megha Engg. Enterprises, Chennai
		M/s Klemmen Engg. Corporation, Chennai
9.	OTI/WTI with	M/s. Accurate Control,UK
<i>)</i> .	repeater	M/s. AKM, Swedan
	10pouloi	M/s. Perfect Control, Chennai, India
		M/s. Preci Measure, Banglore
		M/s Radix Electrosystems Pvt. Ltd/ Radix Pyrotech India
10.	Magnetic oil gauge	M/s. Sukrut Udyog, Pune
10.	iviagnene on gauge	1
1 1	Puchholz Dolov & O:1	M/s. Yogya, Jhansi
11.	Buchholz Relay & Oil	M/s. Fukuda Instrument, Japan
	surge relays	M/s. Atvus, Calcutta
		M/s. English Electric, Chennai
		M/s. Prayog; M/s BHEL
1.0		M/s Instrument and Control, Vadodara
12.	Pressure Relief Device	M/s. Qualtrol, USA

S No	Name of Item	Supplier
D. 110.	Trume of Item	M/s. GE, USA;
		M/s. Sukrut Udyog, Pune
13.	Fan & Motor	M/s. Alstom (earlier Areva)
13.	Tall & Motor	M/s. CGL, Mumbai
		M/s. Khaitan, Calcutta.
		M/s EPC, Calcutta
		M/s Marathan
14.	Un imprognated	M/s. Permali Wallace Bhopal
14.	Un-impregnated Densified laminated	M/s. Kit ply Assam
	wood	M/s. Mysore Polymers Banglore
	woou	M/s Narmada Forest Ind. Pvt. Ltd. Bhopal.
		M/s Western India Plywood , Kerala
		M/s Rochling Detonite
15.	Valves	M/s. Leader
13.	vaives	M/s. Bombay Metal & Alloys
		M/s. Audco
		M/s. Petson
		M/s. Manixon
		M/s. Creseant
		M/s Precision Engg. Kottayam, M/s Eapen Joseph, Kottayam
		i
		M/s Apex Piping Systems, Jalandhar
		M/s Liberty Engg., Mumbai
		M/s Niton Valves, Mumbai
		M/s Eapen Joseph & Co., Coimbatore
		M/s Oswal Agra
		M/s Neo Engg. Ahamedabad M/s CG Valve Udaipur
16.	MCB	M/s. Sieman
10.	WCD	M/s. MDS
		M/s. S&S
		M/s. Havell's
17.	Fuse	M/s. Siemens/ S&S / Areva / Havell's
19.	OLTC Complete	M/s. BHEL
17.	OLIC Complete	M/s. CTR
		M/s. TELK
		M/s Easun, Madras
20.	Terminal Blocks	M/s. ELMEX
20.	Terrimar Diocks	M/s. Technoplast,
		M/s. Tosha
21.	Silica gel Breather	M/s. Yogya Enterprises, Jhansi.
41.	Sinca ger Dicather	M/s. Anusen Industries, Pune.
		M/s Instruments & Controls , Vadodara, India
22.	Radiator	M/s CTR Manufacturing Industries, Pune
<i>4</i> 4.	Naulaioi	M/s Thermal Transformer Product, Bangalore
		M/s Exotherm, Bangalore.
		M/s P.E. Engg. Hyderanad.
		M/s Hitech Switchgear, Mumbai
		M/s Mahindra Electrical works
23.	Online DGA	M/s Triveni Electroplast M/s GE Kelman Transfix
۷۵.	Offilia DGA	
		M/s Morgan Schaffer Calisto
		M/s A-E Berley Hydrocol

S. N	o. Name of Item	Supplier	
24.	NIFPS	M/s Easun MR tap changer Puducherry	

VENDOR LIST FOR FIRE PROTECTION PACKAGE

S.No.	Equipment/Material	Make
1.	Pumps	KBL/M&P/B&C
	(Horizontal Centrifugal)	
2.	Motors (L.T.)	KIRLOSKAR/GEC
	,	SIEMENS/ ABB/CROMPTON
3.	Diesel Engine	Ruston & Hornsby (Greaves)/
	8	KIRLOSKAR OIL ENGINE LTD
4.	Air Compressor	KGK/ELGI/INGERSOL
		RAND
5.	Batteries	EXIDE/AMCO/AMARA RAJA
6.	M.S./G.I Pipes	JINDAL/PRAKASH/
		SAIL/ LLOYD METALS &
		ENGINEERS LTD.
7.	C. I. Valves	H. Sarkar/Venus/Kalpana
, .	C. I. V 41 V 65	(Gate & Check)
8.	Gun Metal Valves (Globe)	Leader
9.	Float operated Gate Valve	levcon/sigma
10.	Deluge Valve	ACE Turnkey/HD Fire
11.	Strainer (Y-Type	Grandprix/Jaypee/Multitex/& Basket
	Ziamier (1 Type	arat Otofilt
12.	Hume pipe	Indian Hume Pipe/Pargate
	r-F	Concrete Udyog Delhi
13.	H. V. Spray Nozzles	H.D. Fire/ACE Turnkey
14.	Q. B. Detectors	H.D Fire/ACE Turnkey
15.	Pressure Gauge	H. Guru/General Instrument
16.	Pressure Switches	Indfos/Switzer/Verma Trafag
17.	Level Switches	Levcon/Sigma
18.	Level Indicator	Levcon/Sigma
19.	Level Gauge	Levcon/Sigma
20.	Hydrant Valves & Accessories	Sukan/Shah Bhogilal
21.	Hoses (Flax Canvas)	Jayshree Calcutta/Newage
22.	Solenoid Valves	AVCON/ROTEX
23.	Heat & Smoke Detectors	Apollo, U.K. /Pyrotonics /
		system Sensor/ Nittan
24.	Cables	Polycab/PRWE/GEMSCAB/
		KEI/PARAMOUNT
25.	Fire Extinguishers	Nitin/Vijay Fire/Lightex/
	The Emmanshers	Zenith/ Minimax
26.	Fire alarm Panels	ECD
20. 27.	Annunciators	Peacon/Piri/Procon
28.	Dished Ends	Anoop Engg./Motilal/Kanara
29.	Local control panels &	Suchitra/ Vikas Engg./UNILEC/JASI
- /.	Annunciation panels.	MIKA/ Bose corporation.
30.	Response Indicators/Hooters	M.C. Engineering Delhi/
50.	Break Glass Units	Maths, Bombay/ Mehta &
	1415/015 \$ 110/3/3 \$ / HHL3	(VIGILIA), 12/1111/0/17/17/111/0/(X)

Note:-

The names of the vendors are subject to further verification of various documents viz. 1) 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.

- Any other items/component not covered in these lists Reputed make subject to prior 2) permission from CSPTCL duly furnishing all their credentials and documents ought by office of ED /CE (Planning & Projects).
- CSPTCL will take into account our past experience with various vendors/ suppliers 3) with regards to quality of their equipment, its performance and their after sales service while making a final selection of vendors.
- Equipments/material of those vendors / suppliers, who are debarred / blacklisted from 4) future business with CSPTCL or successor power companies of erstwhile CSEB, shall not be accepted.