

GENERAL TERMS AND CONDITIONS
E-TENDER & CONTRACT AGREEMENT

1.1 SUBMISSION OF TENDERS:

Notwithstanding anything contained to the contrary in the specifications of tenders or in subsequent exchange of correspondence, these conditions of contract shall be binding on the contractor and any change or variation expressed or implied, however, made in the said conditions shall not be valid or operated unless expressly approved by the competent authority. The contractor shall be deemed to have fully informed himself and to have special knowledge of the provisions of the conditions of contract herein contained.

The following instructions must be carefully observed by all tenderers. Quotations/tenders not strictly in accordance with these instructions will be liable to be rejected. Failure to comply with any of the instruction or to offer explanation for non-compliance is likely to render effective comparison of the tender as a whole impossible and may lead to rejection of an otherwise apparently lowest offer.

- i) The tender must be completed in all respects.
- ii) Telegraphic/Tele fax/Telex quotations will not be accepted. The received tenders shall be assumed as agreed to all the terms & conditions of floated tender enquiry.
- iii) The tender/quotation shall be submitted in separate 03 parts, First part shall contain the EMD, the second part should contain all the required documents of tenders/ experience as listed in this NIT etc. and the third part shall contain the price bid/ rate quotation.

*Only on successful execution of part 1 and 2, the third part shall be opened for tenderer. In case the deposit of Earnest Money is in accordance with the terms of Notice inviting Tender only then the second part containing the tender shall be opened and subsequently the third part be opened after part-2. EMD shall be deposited by bidder through online mode as per procedure of e-tender.

- iv) Quotations/Tenders shall be received by due date and time given in the Tender Notice only and shall be opened by the committee at the given time in the presence of tenderers or their authorized representatives who may like to be present. In case due date of opening tenders happens to be a holiday, tenders shall be received and opened at same time/ hours on the next working day.

1.2 TENDERS TO BE INVALIDATED

The tenders must be complete in all respects. Conditional, incomplete or not properly sealed tenders and tenders received late due to any reason whatsoever will be rejected.

1.3 SIGNING OF THE TENDERS

Tenders shall be signed (Part-02 of tender) by the owner or person holding power of attorney by him to do so. Necessary documents in support thereof should be enclosed with bid at the time of submission online if applicable, failing which tenders may not be considered.

1.4 EARNEST MONEY:

- i) The amount of Rs. 56,500 /- shall require to be deposited as EMD by tenderer.
- ii) In case of successful tenders earnest money shall be converted into security deposit excess to be refunded and shortfall to be paid by the contractor within 7 days of issue of allotment order.
- iii) In case of tenders not accepted, the Earnest Money shall be refunded as per procedure of e-tender.
- iv) Tenders without Earnest Money shall not be entertained/ opened.


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1.5 COMPLETION SCHEDULE

Contractor shall have to specify the completion schedule in his quotation. Maximum allowed period shall be 180 days from the date of allotment.

1.6 ALL CUTTING/CORRECTIONS TO BE INITIALLED:

Each page of the tender document including the schedule of quantity and bid drawings be signed and dated by tenderer in ink as a token of his having examined the same. Any correction in the rates quoted in the schedule of quantities shall also be signed with date by tenderer before submitting the tender. All corrections and additions or pasted slips should be initialed by the contractor. Non-compliance with these conditions will make the tender liable to rejection.

1.7 RIGHT TO REJECT ALL OR ANY TENDER:

The officer inviting Tenders/contracting agency/PSTCL reserves the right to reject any or all the tenders/without assigning reasons. He will not be responsible for and will not pay any expenses or losses that may be incurred by tenderer in preparation of the tender. The tender issuing office also reserves the right to change the quantity and/or cancel the tender at any stage before allotment of work/ allotment order.

1.8 VALIDITY OF TENDERS:

The tenders and rates of tenders as submitted should be valid for acceptance for at least **120 days** from the date of opening of tender.

1.9 SIGNING OF CONTRACT

In the event of tender being accepted an intimation shall be given to the contractor, who shall thereupon attend office of Accepting officer to sign copies of the specification and other documents and to execute the contract agreement within specified dates of issues of such intimation failing which acceptance of his tender shall be cancelled and his earnest money will be forfeited. No Payment will be released unless the agreement has been signed.

1.10 OPENING OF TENDER

The Competent authority will open tenders on due date, time & place in the presence of any or all the tenderers or their authorized representative on the production of letter of authority, who may like to be present at the time of opening of the tender and they will append their signatures in the tender register in token of their presence.

1.11 GOODS AND SERVICE TAX:- PSTCL is registered centrally in the state under GSTIN 03AAFCP4714J1ZK

- 1) GST, as applicable will be paid as per prevailing provisions of GST Act & Laws against submission of documentary proof at rate(s) prevailing during the contracted delivery period on the basis of actual. The following certificates shall have to be furnished along with invoice -cum-gate pass duly signed by the authorized agent/signatory. The first invoice should accompany the specimen signatures of the authorized signatory duly attested by the managing director of the factory with a copy of orders regarding his appointment as authorized signatory.
- 2) Certified that the transaction on which the GST is claimed has been/shall be included in the return submitted/to be submitted to the GST Authorities and the amount claimed from the PSTCL has been/shall be paid to the GST Authorities.
- 3) Certified that the goods, on which GST has been charged have not been exempted under GST Act or the rules made there-under and that the GST charged on these goods is not more than what is payable under the provisions of relevant act.
- 4) Certified that we shall indemnify the PSTCL in case it is found at a later stage, that wrong or incorrect payment had been received on account of GST; the same will be refunded.


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- 5) Certified that we are registered dealer under the GST Act and our registration No. is _____
- i) In case the GST is applicable and is required to be paid extra as referred to Para-(i) above, the tenderer should clearly indicate HSN code of item along with present rate (in percentage) applicable to their company.
- ii) The maximum rate (in percentage) up-to which the GST may become leviable /payable under the prevailing Rules & Regulations applicable to their company, should also be clearly indicated in their tender.
- iii) In case the GST is applicable/payable, necessary certificate of GST claimed/GST Gate Pass duly authenticated by the authorized representative of GST Authorities , shall however be furnished by the supplier along with each consignment. The supplier should, therefore, clearly indicate in their tender that whether such GST Gate Passes/Certificate shall be furnished by them or not.
- iv) Further any loss due to non-availability of ITC or levy of penalty/interest payable by PSTCL on account of non-filing of return or non-compliance of any miss-statement given under the provisions of GST ACT by the firms shall be recoverable from them.
- v) Further GST at applicable rates on principal supply shall be payable on freight and insurance.

Note: The firms indicating nil or concessional rate of GST in their tenders (if any) will have to absorb GST up to the full rate applicable at the time of tendering.

1.12 TERMS OF PAYMENT

Payment shall be made as per details listed in payment clause.

1.13 FORCE MAJEURE

During the pendency of the Contract/Allotment Order ,if the performance in whole/part by either party or any obligation there under, is prevented/delayed by causes arising out of any war, hostility, civil commotion, acts of public enemy, sabotage fire, floods, explosions, epidemics or non-availability of Government controlled raw material under Orders/ Instructions of Central/ State Government regulations, strikes, lockouts, embargo, act of Civil/Military Authorities of any other causes beyond their reasonable control, neither of the two parties shall be made liable for loss or damages due to delay or failure to perform the contract during the currency of Force Majeure conditions, provided that the happening is notified in writing (with documentary proof) within 15 days from the date of the occurrence.

1.14 RATES

Contractor shall fill the rates, specifying GST/ tax in the Price bid Performa annexed at Annexure A. However, the minimum market rates may be quoted where specifically labour rates are not listed/ available.

1.15 D.D.O.

Payment shall be made by A.O./Grid Construction circle, PSTCL, Ludhiana as per rules and regulations of PSTCL. The copies of bills shall be sent directly to the respective Division office i.e. o/o Addl. SE/ Grid Const. Division, PSTCL, Patiala or any other office termed as Er.-in-charge at a later stage.


1.16 PENALTY/DAMAGES FOR DELAY IN EXECUTION OF WORK

If the contractor fails to complete the work within the stipulated period of the Contract, the same is liable to be charged as per details listed in penalty clause.

1.17 CANCELLATION

The Purchaser reserves the right to cancel/amend or alter this order without assigning any reason what so ever at any time before the allotment of any order. However,


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alteration in quantity at a later stage (if any) shall be deemed valid as per actual site requirement and payment shall be released as per actual work done at site.

1.18 CHANGES

No variation or modification whatsoever of any of the terms and provisions shall be valid unless mutually agreed upon in writing by both the parties i.e. PSTCL and contractor.

1.19 The Rates should be quoted in the Price bid performa (Annexure A) enclosed.

1.20 Tenderers will have to comply with all the rules and regulations under Factory Act, Labour Laws, Industrial dispute act, EPF act, Bonus Act, retrenchment compensation and all other applicable laws/ acts etc. The bidder shall himself be responsible for the same. PSTCL shall have no responsibility for same.

1.21 CIVIL SUIT/ JURISDICTION

All legal & Arbitration proceedings in connection with the Allotment Order/Contract shall be subject to the territorial jurisdiction of the Local Civil Courts at Patiala.

12.22 Qualifying Criteria:

The bidder should have satisfactorily executed similar/ related works at 220KV or 400KV rating substations for value of minimum Rs. 14 Lacs in last three years from last date of submission of bids. Experience/ Appraisal certificate is required to be submitted in technical part of bid. The contractor should have C.E.I license of Punjab, GST No., PAN No., Income Tax No., EPF No., labour license (whichever and as applicable) etc., income tax returns of last 3 years, Solvency certificate, turnover certificate etc. and are required to be submitted in technical part of bid. The submission of tenders shall be assumed that the bidder has all valid said licenses/ documents/ registrations etc.

OR

The bidder must be empaneled in PSTCL office(s) as a contractor for carrying out such jobs as per norms of work regulation of PSTCL (amended from time to time) w.r.t. listed tender value. In case, the bidder is not empaneled in PSTCL office(s) at present, the bidder must need to be get empaneled through competent authority to participate before opening date of the bids.

12.23 Deviations from specification:

Should the tenderer wish to depart from the provisions of the specification either on account of better manufacturing practices or for any other good reasons, he shall draw attention to the proposed points of departure in his tender & submit such full information, drawings and specification so that the merit of his proposal may be fully understood. The specification shall be held binding unless the departures have been fully recorded as required above. Detailed calculations/comments justifying the suitability of the relays/protection schemes/transducers offered should be given in the first instance. The calculations/comments should be supported by schematic drawings, write ups, wherever necessary.

12.24 Other instructions-

1. Please note that the tenders against this tender enquiry are being invited through e-tendering mode only. In case of any clarification the prospective bidders may contact this office or M/s GePNIC as mentioned on the PSTCL website & (<https://eproc.punjab.gov.in/nlcgep>) well in time before the due date for submission of tender.


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2. Tender specification can only be downloaded from website (<https://eproc.punjab.gov.in/>) and no hard copy of the same will be issued by this office.
3. Other information may also be available on www.pstcl.org. All other corrigendums, amendments (if any) shall be published only on e-proc website and PSTCL website. Query/ clarification (if any) may be obtained from email ID- srxen-gcd-pta@pstcl.org & se-gridcon-ldh@pstcl.org

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SECTION - I
INSTRUCTIONS TO BIDDERS

1. SCOPE OF BID:

- 1.1 Chief Engineer/TS, PSTCL, Patiala & Dy. CE/ Grid Const. Circle, PSTCL, Ludhiana through office of Addl. SE/ Grid Const. Circle, PSTCL, Patiala herein after wishes to invite the Bids in 03 parts for the outsourcing of labour jobs for erection of new 220KV sub-station Wazirabad near Mandi-Gobindgarh.
- 1.2 The successful bidder will have to complete the works by the intended completion date specified in the contract date. Maximum allowed time shall be **180 days** from date of allotment order.
- 1.3 The scope of work shall include complete erection (including making it ready for testing) of all the required material/ equipment of new 220KV sub-station Wazirabad near Mandi-Gobindgarh in FOR Destination/Site basis including complete loading and unloading, transportation (from PSTCL store/ concerned office to site of work), insurance and storage of equipment at site.
- 1.4 Final checking, testing and commissioning.
After completion of works, final checking shall be done by the contractor to ensure that all the erection, pre-testing and commissioning has been done according to specifications/ rules and regulations of PSTCL and as approved by PSTCL. All the works shall be thoroughly inspected keeping in view the following main points:
- All the equipment has been erected completely in all respects to work as finally desired to PSTCL.
 - All the work has been done in compliance to the instructions/ regulations of PSTCL.
 - All the equipment, conductor, structures, earthing material and earth wire accessories etc. are properly installed, earthed, wired, connected etc. as per requirement.
 - The insulation resistance of LA pits & all the equipments is tested by the contractor by providing his own equipment, labour etc. to the satisfaction by PSTCL.
 - The chief electric inspector/ Punjab tests the substations for satisfactory operation before commissioning. The responsibility for obtaining statutory clearance from CEI shall be responsibility of contractor only. PSTCL shall be liable to pay the charges once for CEI fee. At any stage, if any further fee for CEI is required to deposit because of first failed inspection, shall be responsibility of contractor.

2.0 QUALIFICATION REQUIREMENT

- 2.1 To be technically suitable the bidder should fulfill the following minimum criteria:
- Should be technically and financially sound to have such type of tenders up to minimum value of 30 lacs. Bank solvency certificate for minimum 5 lacs shall require to be deposited in part-02 documents of tender.
 - The experience certificate of performing similar electrical works is also required to be deposited in part-02 of tender.
 - All the charges applicable for self-appraisal/ performance shall be deposited by the applicable firms to PSTCL to obtain the same before last date of submission of tenders. No delay in this regard shall be entertained.
 - Officer inviting the tender shall have full power to reject OR declare 'not eligible' to any firm as per documents submitted by firm, upon evaluation even not specifying any reason.

Bidder shall submit the proofs in respect of the above along with other tender documents and the aspect will be examined during the technical evaluation of the tender.

3.0 COST OF BIDDING

The bidder shall bear all the cost and expenses associated with preparation and submission of its bid including post bid discussions, technical and other presentation etc and employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.


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4.0 CLARIFICATION OF BID DOCUMENTS

- i) If the prospective bidder finds discrepancies or omission in the specifications and document or is in doubt as to the true meaning of any part, he shall at once make a request in writing for any interpretation/clarifications to the employer. The employer then will issue interpretations and clarifications as he may think fit in writing. After receipt of such interpretations and clarifications, the bidder may submit his bid but within the time and date as specified in the invitation of bid. All such interpretations and clarifications shall form a part of the bidding document and shall accompany the Bidder's proposal. A prospective bidder requiring any clarification on bidding documents may notify the employer in writing.
- ii) Verbal clarification and information given by the Employer or his employee(s) shall not in any way be binding on the employer.

5.0 FOR BIDDING DOCUMENTS

- i) At any time prior to the deadline for submission of bids, the owner may, for any reason, whether at its own initiative or in response to a clarification required by a prospective bidder, modify the Bidding documents by amendment(s).
- ii) The amendment/ corrigendum will be notified only on online tender website. Employer will bear no responsibility or liability arising out of non-receipt of the same to bidder in time or otherwise.
- iii) In order to afford protective bidder reasonable time in which to take the amendment into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of bids.
- iv) Such amendments, clarifications etc. shall be binding on Bidders and will be given due consideration by the Bidder while they submit their bids and invariably enclose such documents as a part of the Bid.

6.0 LANGUAGE OF BID:

The tender inviting authority respects the local regional language Punjabi at most. But being the procedure online and to provide a fair chance to firms outside the Punjab also, the bid prepared by the bidders and all correspondence and documents relating to the bid, exchanged by the bidder and all shall be written in English language.

7. LOCAL CONDITIONS:

- i) It will be imperative on each bidder to fully inform himself of all local condition and factors, which may have any effect on the execution of the contract covered under these documents and specifications. The Employer shall not entertain any request for clarification from the Bidders regarding such local conditions.
- ii) It must be understood and agreed that such factors have properly been investigated and considered while submitting the proposal. No claim for financial adjustment to the contract awarded under these specifications and documents will be entertained by the Employer. Neither any change in the time schedule of the contract nor any financial adjustment arising thereof shall be permitted by the employer which are based on the lack of such clear information or its effect on the cost of the works to the bidder.

8. DOCUMENTS COMPRISING THE BID:

Three part bids: The bid shall be prepared in three parts.

Tenders shall be submitted in three parts only through online procedure.


Part-I: Earnest Money

Part-II: Commercial and Technical Conditions/ qualification describing documents.

Part-III: Price bid


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In this case of e-tendering, Part-I, Part-II and Part-III shall be submitted online only. 'Earnest Money i.e. Part-1', shall be examined firstly and if the earnest money is found in order then the Part-II, 'Commercial & Technical conditions', qualifying documents etc. shall be opened. After opening Part-II of the bids (Technical/Commercial), the bids will be evaluated by PSTCL. The third part of the bids (Price Bids) shall be opened in case of only those firms whose Part-II of the bids after evaluation is found to be conforming to the specification and eligible. The date and time for opening Part-III of the bids will be intimated to the qualifying firms. The price bids (Part-III) will be opened in the presence of representatives of the qualifying bidders who choose to attend.

9. CONTRACT QUALITY ASSURANCE

The Bidder shall include in his proposal the Quality Assurance Program containing the overall quality management and procedures, which process to follow in the performance of the contract during various phases as detailed in relevant clauses of the technical specification. The employer reserves the right to suitably make changes in the quality assurance program management and procedure, so as to ensure suitable quality.

10. BID PRICE

- i. Price quoted for each item/ job in the schedule of prices shall be reasonable for each item/ job in the judgment of the PSTCL. Under no circumstances, will a manifestly unbalanced bid be considered.
- ii. The bidder shall fill in the unit price for all items of goods to be supplied/ jobs to be done only as per price bid performance and services to be rendered described in the schedule of prices, whether quantities are stated or not. Items against which no unit price is entered by the bidder will not be paid for by the employer when executed and shall be deemed to be covered in the prices of other items in the schedule of prices.
- iii. The bidder shall complete the appropriate price and other schedules furnished in the bidding documents, indicating the supplies and the services to be provided.
- iv. Prices quoted by the bidder for the scope of work as well as works shall be 'FIRM' & FOR destination of substation during the performance of the contract and shall not be subject to variation on any account.
- v. The quoted price in part-3 of tender shall be deemed as final. Any firm offering discount on the quoted price or after the opening of tender will be out rightly rejected.
- ii. All statutory variations and fresh levy of any tax/ duty will be to PSTCL's account within contractual delivery period/ schedule of work.


11. BID VALIDITY


- i) Validity of the tender/bid should be valid for a period of 120 (one hundred twenty) calendar days from the date of opening of the part-3 of tender, failing which tenders/bids shall be summarily rejected.
- ii) In exceptional circumstances, prior to expiry of the original Bid validity period, the Employer may request the Bidder to extend the period of validity for a specified additional period. The request and the response thereto shall be made in writing/ online. The bidder may refuse the request without forfeiting its bid security. The bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid for the period of the extension.

12. TAXES AND DUTIES

- 12.1 All Custom Duties, GST, Excise Duties, Sales Taxes, Work Contract Tax and other Taxes, Duties & Levies payable by the bidders in respect of the transaction between the bidders and their vendors/sub-suppliers/ sub-contractors etc. while procuring any components or equipment erection etc. shall be included in the bid price and no claim on this behalf will be entertained by the owner.


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- 12.2 As regards the Income Tax, surcharge on Income Tax and other taxes (any applicable) which are liable to deduction at source, the Bidder shall be responsible for such payment to the concerned authorities within the prescribed period.
- 12.3 Employer would not bear any liability on account of service tax. Employer shall, however, deduct such tax at source as per the rules, if any, and issue necessary certificate to the contractor.
- 12.4 Sales Tax / VAT or Works Contract Tax , Turnover Tax or any other similar taxes under the sales tax / VAT Act for services to be performed in India, as applicable is included in Contract Price/ quoted price and the Employer would not bear any liability on this account. The Employer shall, however, deduct such taxes at source as per the rules and issue TDS certificate to the contractor.

13. Earnest money for Tenders

- i) The tenderer shall be required to submit earnest money through online mode of e-tendering and the EMD amount shall be Rs. 56,500 /-.
- ii) Public sectors undertaking fully owned by the Punjab Govt. /Central Govt. /other State Govts. shall be exempted from depositing earnest money (only if provisioned under rules and regulations of PSTCL), provided that a certificate of Govt. ownership shall be submitted in the envelope for earnest money.
- iii) Earnest money shall be forfeited in case of withdrawal/modification of an offer within the validity period as required in the NIT/tender specification after opening of tender.
- iv) In case of tenders not accepted, the earnest money shall be refunded as per procedure of online tendering website the award of order/control (LOI) to the successful tenderer(s) or after the expiry of validity period, whichever is later.

14. EMD Condition:

No further tender parts i.e. Part-02 and Part-03 shall be entertained for bidder if the Part-01 or EMD of any bidder is found not submitted/ deposited in due date and time.

15 (A) REFUND OF SECURITY DEPOSIT

- 15.1 On faithful execution of contract in all respect the security deposit of the contractor shall be refunded after the expiry of warranty period as provided in the contract.
- 15.2 Nodal officer shall issue the certificate for site clearance.
- 15.3 Provisional completion certificate shall be issued within 30 days of the completion of the work.
- 15.4 On receipt of provisional completion certificate the post construction technical check may also be done and observations shall be rectified out within defect liability period by bidder if found any.

(B) FORFEITURE OF SECURITY DEPOSIT


In the event of default on the part of Contractor in the faithful execution, the security deposit may be forfeited by an order of the Contracting Agency/ competent authority.

The forfeiture of security deposit shall be without prejudice to any other rights arising or accruing to the Board under relevant provision of the contract like penalty/damages for delay in delivery or risk execution of work including suspension of business dealings with PSTCL for a specific period.

16 FORMAT OF BID

- 16.1 The bidder shall prepare and submit the bid online only.
- 16.2 The bid shall be typed and digitally shall be signed/ submitted by the bidder or a person or person duly authorized to the bidder to the contract. The letter of authorization shall be indicated by the written power of attorney the bid. All pages of the bid except for non-printed literature shall be initiated by the person or persons signing the bid.


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- 16.3 The bid shall contain no interpolation, erasure or overwriting except as necessary to correct errors made by the bidder, in that case, each such correction shall be initiated by the person or persons signing the bid.

17. SIGNATURE OF BID in Part-02 of tender -

- The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the bidder with his usual signature. The names of all persons signing the bid should also be typed or printed below the signature.
- 17.2 Bid by a partnership must be furnished with full names of all partners and be signed with the partnership name, followed by the signature(s) and designation(s) of the authorized partner(s) or other authorized representative(s). Copy of the partnership deed must be supplied along with the bid.
- 17.3 Bid by Corporation/Company must be signed with the legal name of the Corporation/Company by the President, Managing Director or by the Secretary/other person or persons authorized to bid on behalf of such corporation/company in the matter.
- 17.4 A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his Principal may be rejected.
- 17.5 Satisfactory evidence of authority of the person signing on behalf of the bidder shall be furnished with the bid, if required to PSTCL.
- 17.6 The bidder's name stated on the proposal shall be the exact legal name of the firm.
- 17.7 Bids not conforming to the above requirements of signing may be disqualified as per decision of PSTCL.

18. DEADLINE FOR SUBMISSION OF BID

The employer may at its discretion, extend this deadline for the submission of bids by amending the bidding document, in which case all rights and obligations of the employer and bidder previously subject to the deadline will thereafter be subject to the deadline as extended. Any bid/ bid documents received after the time and date fixed or extended for submission of bids will be rejected and/or returned unopened to the bidder.

19. OPENING OF BIDS BY EMPLOYER

- a. After the bid is received in three parts, Part-I & Part-II will be opened online on the date and time for opening of bids in the invitation to bids or in case any extension has been given thereto, on the extended bid opening date and time notified to all the bidders who have purchased the bidding documents. The bidder's representatives who are present shall sign a register evidencing their attendance.
- b. The bidder's names, bid prices, modifications, bid withdrawals and the presence or absence of the requisite bid security and such other details as the employer at its discretion may consider appropriate, will be announced at the opening.
- c. No electronic recording devices of the firms/ bidders will be permitted during bid opening.

20. CLARIFICATION OF BIDS

To assist in the examination, evaluation and comparisons of bids, the employer may at its discretion ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing. After the evaluation of technical/ commercial bid, request of successful bidders regarding any change in prices or substance of the bid will not be entertained by the employer.

21. EXAMINATION OF BIDS

- a. The employer will examine the bids to determine whether these are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are


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- generally in order.
- b. The price furnished for various price schedules should be consistent with each other, so the bidder should ensure that the price furnished in the various price schedules are consistent with each other. In the case of any inconsistency in the price furnished in the specified price schedules, the employer shall be entitled to consider the lowest price for the purpose of evaluation and award of contract. All arithmetical errors will be rectified/ considered on the basis of the unit price or total price whichever is more beneficial to the employer.
 - c. The decision of the PSTCL shall be considered final.

22 COMPARISON OF BIDS

- a. The bids shall be compared as per terms and conditions of PSTCL.
- b. PSTCL may award the whole scope in single allotment or many tenders/ in parts as required to PSTCL. There shall be no liability to award a single allotment to any one bidders. Multiple awards/ allotments may also be issued being the financial benefit to PSTCL.

23 CONTACTING THE EMPLOYER

Bids shall be deemed to be under consideration immediately after they are opened and until such time official intimation of award/rejection is made by the employer to the bidders. While the bids are under consideration, bidder and/or his representatives or the interested parties are advised to refrain from contracting by any means the employer and/or his employees/representative on matter related to the bids under consideration. The employer, if necessary will obtain clarifications on the bids by requesting for such information from any or all the bidders, in writing. Bidders will not be permitted to change the substance of the bids after the bids have been opened. Any effort by a bidder to influence the purchaser in any way may result in rejection of the bidder's bid.

24 AWARD OF CONTRACT

- a. The owner will award the contract to the successful bidder, whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the bidder is determined to be qualified to perform the Contract satisfactorily. The owner shall be the sole judge in this regard.
- b. Further, the owner reserves the right to award separate contracts to two or more parties in line with the terms and conditions specified in the accompanying technical specification.
- c. The award for erection, pre-testing and commissioning shall be on the basis of FOR destination (site) basis prices inclusive of all type of charges except GST which is to be quoted separately.

25 EMPLOYER'S SINGLE ACCEPTANCE OF ANY BID AND REJECTION OF ANY OR ALL BIDS

The employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract without thereby incurring any liability to the affected bidder or bidders any obligation to inform the affected bidder or bidders on the grounds for the employer's action.

26 NOTIFICATION OF AWARD

- a. Prior to the expiration of the period of bid validity and extended validity period, if any, the employer will not specifically notify the successful/ unsuccessful bidder in writing by registered letter or by cable or telex or email to be confirmed in writing by registered letter, that its bid has been accepted.


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- b. The notification of award will constitute the formation of the contract.
- c. Upon the successful bidder's furnishing of performance guarantee, the employer will promptly notify each unsuccessful bidder and will discharge his bid security/ EMD as per regulations of PSTCL.

27 SIGNING OF CONTRACT

- a. At the same time as the employer notifies the successful bidder that its bid has been accepted the employer will send the bidder the contract form incorporating all agreements between the parties.
- b. Within fifteen (15) days of the notification of the award the successful bidder shall sign and date the contract and return it to the employer.

28 CONTRACT PERFORMANCE GUARANTEE/ BANK GUARANTEE-

- a. Within 30 days of receipt of notification of award/ allotment order (whichever earlier) from the employer, the successful bidder to whom the work is awarded shall be required to furnish a performance bank guarantee from a nationalized bank in favor of employer. The guarantee amount shall be equal to ten percent (minimum) of the total contract price and it shall guarantee the faithful performance of the contract in accordance with the terms & conditions specified in these documents and specifications. The Guarantee shall be valid up to 90 days after the end of guarantee period i.e. the Defects Liability period.
- b. The performance Guarantee shall cover additionally the following guarantees to the employer-
 - 1. The successful bidder guarantees the successful and satisfactory operation of the material/equipment furnished and erected under the contract, as per the specification and documents.
 - 2. The successful bidder guarantees that the material & equipment provided and installed by him shall be free from the defects in design, material and workmanship and shall upon written notice from the employer provide remedy free of expense to the employer for such defects as developed under the normal use of the said material and equipment within the period of guarantee specified in the relevant clause of the conditions of contract.
- c. The contract performance guarantee is intended to secure the meticulous execution/performance of the entire contract by the contractor.
- d. The performance guarantee will be returned to the contractor without any interest at the end of the guarantee period.

29 SITE VISIT

- a. The bidder is advised to visit and examine the site of works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the works. The cost of visiting the site shall be at the bidder's own expense.
- b. The bidder and any of its personnel or agents will be granted permission by the employer to enter upon its premises and lands for the purpose of such visit.

30 STORAGE OF MATERIAL

The bidder shall store all the material/equipment in the well-maintained store at site at his cost. All the services required for maintaining the stores including storage insurance shall also be at the cost of the bidder.

31 UNDERSTANDING OF BID DOCUMENTS

- a. A prospective bidder is expected to examine all instruction, forms, terms & specifications in the bid documents and fully inform himself to all conditions and


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matters, which may in any way affect the scope of work or the cost thereof. Failure to furnish all information required by the bid documents or submission of a bid not substantially responsive to the bid document in every respect will be at the bidder's risk and may result in the rejection of its bid.

32 PRICE ADJUSTMENT

Price charged by the supplier for goods delivered and services performed under the contract shall remain 'FIRM'.

33 TIME SCHEDULE

- a. The basic consideration and the essence of the contract shall be strict adherence to the time schedule for performing the specified works.
- b. The owner reserves the right to request for a change in the work schedule during pre-award discussions with successful bidder.
- c. The successful bidder will be required to prepare detailed PERT network and submit within 1 weeks from the award of contract and finalize the same with the owner as per the requirement of PSTCL
- d. The successful bidder immediately after signing of the contract is required to start the detailed engineering and commence works at sites. It is expected that the contractor will commence the erection activity at sites within 2 weeks.

34 CONTRACT QUALITY ASSURANCE

- a. The bidder shall include in his proposal the Quality Assurance Program containing the overall quality management and procedures which he proposes to follow in the performance of the work during various phases of execution.

35 ERECTION TOOLS AND TACKLES

The bidder shall himself arrange the Tools & tackles etc which he proposes to bring to site for the purpose of erection, handling, testing & commissioning including performance & guarantee tests of the equipment. PSTCL shall not pay any charges for T&P, tools and tackles etc.


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SECTION-II
GENERAL CONDITIONS OF CONTRACT

1. DEFINITIONS

1. "Arbitrator" means the person or persons appointed by PSTCL to make a decision on or to settle any dispute or difference between the Employer and the Contractor referred to him/her by the parties.
2. "Associate" means a party who has been conjoined by the Contractor to independently execute a pre-selected part of facilities of the contract and grant him the associated contractual rights and obligations, without diluting the overall responsibility of the contractor in respect of the Facilities under the contract.
3. 'Competent Authority' means the PSTCL or a Committee appointed by the PSTCL or an officer of the PSTCL or authorized officer to decide, give expert advice, specification, design and drawings in connection with the execution of a work/project.
4. 'Contract' means the documents forming the tender, acceptance thereof and the formal agreement executed between the corporation and the Contractor, together with documents referred to therein. It shall include Notice Inviting Tender/Tender Specification including designs & drawings, information & instructions for tenders. Tender (including the warranty, 'Schedule of Quantities and Prices' and other schedules attached thereto), general conditions of the Contract, special conditions, if any, relevant, pre-award correspondence and letter of intent/award thereof.
5. 'Contractor' (including Vendor/Fabricator) means a person or a firm or an undertaking or an institution to whom the work has been allotted for its execution and for rendering services in connections therewith and shall be deemed to include the contractor's successors, authorized representative or assignees approved by the Engineer-in-Charge.
6. 'Contract Price' shall mean either the lump-sum amount named in contract or total of all payments estimated as per Unit Prices & Quantities set-forth in the contract/work order which are to be paid to the Contractor for the work to be done under the contract/work order.
7. 'Contract Period' shall mean the period during which the work shall be executed as agreed between Vendor/Contractor/Fabricator and Employer/Purchaser in the Contract including extensions, if any, granted by the competent authority.
8. 'Completion' shall be defined to be a state of readiness for use after completion of all items of work covered under the scope of a contract to the satisfaction of Engineer-in-charge.
9. 'Corporation' means Punjab State Transmission Corporation Limited.
10. 'Day' means a calendar day of 24 hours irrespective of the number of hours worked or not in that day.
11. 'Date of Contract' means the calendar date on which the Employer/purchaser and Vendor/Contractor/Fabricator have executed/signed the contract. 'Effective date of contract' shall mean the calendar date on which the Employer/purchaser have issued to the vendor Letter of Intent/Award.
12. 'Date of award of Contract' shall mean the date of issue of the work order/allotment letter or the letter of intent, whichever is earlier.
13. 'Drawing' means the drawings, plans and tracings or prints thereof referred to in the specifications and/or appended with the tender documents, any modification of such drawings approved in writing by the PSTCL and shall also include drawings issued for actual construction of the works from time to time by the PSTCL.


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14. 'Employer' shall mean the PSTCL on whose behalf the enquiry is issued and shall include their successors and assigns as well as their authorized officers/representatives.
15. 'Engineer-in-charge' shall mean the officer nominated by PSTCL.
16. 'Quotation' means the rate(s), terms & conditions quoted by a contractor in response to a specific enquiry for a work and/or supply to be executed on 'work order' basis.
17. 'Sub-Vendor'/'Sub-Contractor/Sub-Fabricator' shall mean the person named in the 'Contract' undertaking a part of the work or any person to whom a part of the 'Contract' has been sublet with the consent in writing of the Employer and shall include his heirs, Legal representatives, successors and assigns.
18. 'Specification' shall mean collectively all the terms and stipulations contained in those portion of the contract known as general conditions, the specifications, drawings/sketches and such amendments, revisions, deletions or additions as may be made in the agreement and all written agreements made or to be made pertaining to the method and manner of performing the work or to the quantities and qualities of the materials to be furnished under the contract.

2. APPLICATION:

These general conditions shall apply to the extent that they are not superseded by provisions in Special Conditions of Contract and Technical specification of these bidding documents.

3. STANDARDS

The services provided under this contract shall conform to the standards mentioned in the technical specification and when no applicable standard is mentioned to the authoritative standard appropriate to the service and such standards shall be the latest issued by the concerned institution.

4. LANGUAGE AND MEASURES

All documents pertaining to the contract including specification, schedules, notices, correspondence, operating and maintenance instructions, drawings or any other writing shall be written in English language. The metric system of measurement shall be used exclusively in the contract.

5. CONTRACT DOCUMENTS

5.1 The term Contract Documents shall mean and include the following which shall be deemed to form an integral part of the contract:

- a) Invitation of bid including letter forwarding the bidding documents, instructions to bidders, general conditions of contract, erection condition of contract and special conditions of contract.
- b) Specification of the equipment to be furnished and erected under the contract as brought out in the accompanying technical specification.
- c) Contractor's bid proposal and the documents attached thereto including the letters of clarifications thereto between the contractor and the owner prior to the award of contract except to the extent of repugnancy.
- d) All the material, literature, data and information of any sort given by the contractor along with his bid, subject to the approval of the owner.


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- e) Letter of award and any agreed variations of the conditions of the documents and special terms & conditions of contract, if any.
- 5.2 In the event of any conflict between the above mentioned documents, the matter shall be referred to the empowered officer appointed by the owner whose decision shall be considered as final and binding upon the parties.

6. USE OF CONTRACT DOCUMENTS AND INFORMATION

- 6.1 The contractor shall not, without the owner's prior written consent, disclose the contract or any provision thereof or any specification plan, drawing, pattern sample or information furnished by or on behalf of the owner in connection therewith to any person other than a person employed by the contractor in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.
- 6.2 The contractor shall not without the owner's prior written consent, make use of any document or information enumerated in various contracts documents except for purpose of performing the contract.
- 6.3 The contractor shall not communicate or use in advertising, publicity, sales releases or in any other medium photographs or other production of the works under the contract or descriptions of the site, dimensions, quantity, quality or other information, concerning the works unless prior written permission has been obtained from the owner.
- 6.4 Any document other than the contract itself, enumerated in various contract documents shall remain the property of the owner and shall be returned (in all copies) to the owner on completion of the contractor's performance under the contract if so required by the owner.

7. CONSTRUCTION OF THE CONTRACT

- 7.1 Notwithstanding anything stated elsewhere in the bid documents, the contract to be entered into will be treated as a divisible supply and erection contract. The supply portion of the contract will relate to supply of equipment and materials and the erection portion will relate to the handling at the sites storage, erection, construction, testing & commissioning etc. as defined in the bid documents.
- 7.2 In case of divisible supply and erection contract, or where the owner hands over his equipment to the contractor for executing the contract, then the contractor shall at the time of taking delivery of the equipment/dispatch documents be required to execute an indemnity bond in favor of the owner in the form acceptable to PSTCL for keeping the equipment in safe custody and to utilize the same exclusively for the purposes for the said contract.
- 7.3 The contract shall in all respect be constructed and governed according to Indian laws.

8. JURISDICTION OF CONTRACT

- 8.1 The laws applicable to the contract shall be the laws in force in India. The courts of Patiala shall have exclusive jurisdiction in all matters arising under this contract.

9. MANNER OF EXECUTION OF CONTRACT

- 9.1 The contract agreement unless otherwise agreed to shall be signed within 15 days of the notification of award at the office of the owner at office of tender inviting authority on a date & time to be mutually agreed. The contractor shall provide


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for signing of the contract, performance guarantee, appropriate power of attorney and other requisite materials. In case the contract is to be signed beyond the stipulated time the bid guarantee submitted with the proposal will have to be extended accordingly.

- 9.2 The agreement will be signed in three originals and the contractor shall be provided with one signed original and the rest will be retained by the owner.
- 9.3 The contractor shall provide free of cost to the owner all the engineering data, drawings and descriptive materials submitted with the bid in at least 4 copies to form a part of the contract immediately after issue of letter of award.

10. ENFORCEMENT OF TERMS

- 10.1 The failure of either party to enforce at any time any of the provisions of this contract or any rights in respect thereof or to exercise any option therein provided shall in no way be construed to be a waiver of such provisions rights or options or in any way to affect the validity of time contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other rights it may have under the contract.

11. COMPLETION OF CONTRACT

- 11.1 Unless otherwise terminated under the provisions of any other relevant clause, this contract shall be deemed to have been completed on the expiry of the Guarantee period as provided for under the clause entitled Guarantee in this section.

GUARANTEES & LIABILITIES

12. TIME- THE ESSENCE OF CONTRACT

- 12.1 The contractor immediately on signing of contract is required to engage the manpower and machinery at sites to carry out the detailed survey, land contouring and other preliminary activities required to start the works at site. All approvals required from the owner for this purpose will be sought immediately after signing of contract. The vendors for equipment will be finalized and drawings will be submitted for approval without delay. It is expected that the contractor will commence the erection activity at sites within 02 weeks.
- 12.2 The time and the date of completion of the contract as stipulated in the contract by the owner without or with modification, if any, and so incorporated in the letter of award, shall be deemed to be the essence of the contract. The contractor shall so organize his resources and perform his work as to complete it not later than the date agreed to.
- 12.3 The contractor shall submit a detailed PERT network/bar chart within the time frame agreed consisting of adequate number of activities covering various key phases of the work such as field erection, pre-testing & commissioning activities within 15 days of the date of Notice of Award of contract. This network shall also indicate the interface facilities to be provided by the owner and the dates by which such facilities are needed. The contractor shall discuss the network so submitted with the owner and the agreed network shall form part of the contract documents during the performance of the contract. If in the opinion of the PSTCL proper progress is not maintained, suitable changes may be made in the contractor's operations to ensure proper progress without any cost implication to the owner.
- 12.4 Based on the above agreed network/bar chart weekly report shall be submitted by the contractor as directed by PSTCL.


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- 12.5 Subsequent to the finalization of the network, the contractor shall make available to PSTCL a detailed schedule in line with the agreed contract network.
- 12.6 The above bar charts/ PERT chart shall be compatible with the owner's computer environment and furnished to the owner on such media as may be desired by the owner.

13. EFFECTIVENESS OF CONTRACT

The contract shall be considered as having come into force from the date of the Notification of Award.

14. PENALTY/ DAMAGES FOR DELAY IN DELIVERY:

If the bidder fails to complete the scope of work within the stipulated period of the contract, the same is liable to be rejected and if accepted, the bidder shall be liable to pay as penalty charges a sum of Rs. 0.5% (half of one percent) of the cost of incomplete portion per week of delay or part thereof, not exceeding maximum limit of 10% of the cost of complete unit of uncompleted part so delayed.

However, there will be a slack of 02 weeks that will not entail any penalty and will not involve any additional financial implication to PSTCL during the slack period. Delay beyond the slack will attract penalty for the full period of delay including slack period.

15. GUARANTEE

15.1 The contractor shall warrant that the equipment will be new, unused and in accordance with the contract documents and free from defects. In case of service/ labour, all the work is warrant to be free from any kind of defects. The Defect Liability Period shall be 03 months from the date of final commissioning of the work. The contractor's liability shall be limited to the rectification of defect/ observation.

15.2 In the event of any emergency, where in the judgment of the engineer delay would cause serious loss or damages or adjustment may be made by the owner or a third party chosen by the owner without advance notice to the contractor and the cost of such work shall be paid by the contractor. In the event such action is taken by the owner. The contractor will be notified promptly and he shall assist wherever possible in making necessary correction. This shall not relieve the contractor of his liabilities under the terms & conditions of the contract.

15.3 The cost of any special or general overhaul rendered necessary during the maintenance period due to defects in the workmanship during execution of equipment or defective work carried out by the contractor the same shall be borne by the contractor.

15.4 The acceptance of the equipment by the owner shall in no way relieve the contractor of his obligations under the clause.

16. TAXES, DUTIES AND WCTS

The contractor shall be liable and pay all taxes, duties, levies, lawfully assessed against the owner or the contractor in pursuance of the contract. In addition the contractor shall be responsible for payment of all taxes assessed against the contractor for his personal income & property only. Works contract tax as applicable/payable shall be paid by the contractor and is not reimbursable by the employer/owner.

17. RIGHTS OF PATENTS AND THE ROYALTIES

Royalties and fees for patents covering materials, articles, apparatus, devices


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equipments or processes used in the work shall be deemed to have been included in the contract price. The contractor shall satisfy all demands that may be made at any time for such royalties or fees and he alone shall be liable for any damages or claims for patent infringement and shall keep the owner indemnified in that regard. The contractor shall at his own cost and expense defend all suits of proceedings that may be instituted for alleged infringement of any patents involved in the works and in case of an award of damages, the contractor shall pay for such award. In the event of any suit or other proceedings instituted against the owner, the same shall be defended at the cost and expense of the contractor who shall also satisfy/comply with any decree, order or award made against the owner. But it shall be understood that no such machine, plant, work, material or thing has been used by the owner for any purpose or any manner other than that for which they have been furnished and installed by the contractor and specified under these specifications. Final payment to the contractor by the owner will not be made while any such suit or claim remains unsettled. In the event any apparatus or equipment, or any part thereof furnished by the contractor, is in such suit or proceedings held to constitute infringement, and its use is enjoined, the contractor shall at his option and at his own expense, either procure for the owner, the right to continue the use of said apparatus, equipment or part thereof, replace it with non infringing apparatus or equipment or modify it, so it becomes non infringing.

18. DEFENCE OF SUITS

If any action in court is brought against the owner or an officer or agent of the owner for the failure omission or neglect on the part of the contractor to perform any acts, matters, covenants or things under the contract or for damage injury caused by the alleged omission or negligence on the part of the contractor, his agents, representative or his Sub-contractors, or in connection with any claim based on lawful demands of Sub-contractors, workmen suppliers or employees, the contractors shall in all such cases indemnify and keep the owner, and his representative, harmless from all losses, damages, expenses or decrease arising of such action.

19. LIMITATION ON LIABILITIES

THE FINAL PAYMENT i.e. release of security/ bank guarantee in pursuance of the Contract shall mean the release of the Contractor from all the liabilities under the contract. Such final payment shall be made only at the end of the Warranty/ guarantee Period and during such time all the contractual liabilities and responsibilities of the contractor shall prevail. All other payments made under the contract shall be treated as on-account payments.

20. OWNER'S DECISION

- 20.1 In respect of all matters which are left to the decision of the owner, the owner shall, if required to do so by the contractor, give in writing a decision thereon.
- 20.2 If in the opinion of the contractor a decision made by the owner is not in accordance with the meaning and intent of the contract, the contractor may file with the owner, within 07 days after receipt of the decision a written objection to the decision. Failure to file an objection within the allotted time will be considered as an acceptance of the owner's decision and the decision shall become final and binding.
- 20.3 The owner's decision and the filing of the written objection thereto shall be a condition


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precedent to the right to request arbitration. It is the intent of agreement that there shall be no delay in the execution of the works and the decision of the owner as rendered shall be promptly observed.

21. POWER TO VARY OR OMIT WORK

- 21.1 No alterations, amendments, omissions, suspensions or variations of the works (hereinafter referred to as variation) under the contract as detailed in the contract documents shall be made by the contractor except as directed in writing by the owner, but the owner shall have full power subject to the provisions hereinafter contained from time to time during the execution of the contract by notice in writing to instruct the contractor to make such variation without prejudice to the contract. The contractor shall carry out such variation and be bound by the same conditions as far as applicable as though the said variations occurred in the contract documents. If any suggested variations would in the opinion of the contractor if carried out prevent him from fulfilling any of his obligations or guarantees under the contract, he shall notify the owner thereof in writing and the owner shall decide forthwith whether or not, the same shall be carried out and if the owner confirms his instructions, the contractor obligations and guarantees shall be modified to such an extent as may be mutually agreed. Any agreed difference in cost occasioned by any such variation shall be added to or deducted from the contract price as the case may be.
- 21.2 In the event of owner requiring any variation a reasonable and proper notice shall be given to the contractor to enable him to work his arrangement accordingly and in cases where goods or work done requires to be altered, a reasonable and agreed sum in respect thereof shall be paid to the contractor.
- 21.3 In any case in which the contract has received instructions from the owner as to the requirement of carrying out the alterations or additional or substituted work which either then or later on will in the opinion of the contractor, involve a claim for additional payment, the contractor shall immediately and in no case later than 15 days after receipt of the instructions aforesaid and before carrying out the instructions, advise the owner to that effect. But the owner shall not become liable for the payment of any charges in respect of any such variations, unless the instructions for the performance of the same shall be confirmed in writing by the owner.
- 21.4 If any variation in the works results in reduction of contract price, the parties shall agree in writing so to the extent of any changes in the price, before the contractor proceeds with the changes.
- 21.5 In all the above cases in the event of a disagreement as to the reasonableness of the said sum, the decision of the owner shall prevail.
- 21.6 Notwithstanding anything stated above in this clause the owner shall have the full power to instruct the contractor in writing during the execution of the contract to vary the quantities of the items or groups of items. The contractor shall carry out such variations and be bound by the same conditions as though the said variations occurred in the contract documents. However the contract price shall be adjusted at the rates and the prices provided for the original quantities in the contract. Final payment shall be done as per actual done work.

22. CHANGE OF QUANTITY

- 22.1 During the execution of the contract, the empowered officer of the employer reserves the right to increase or decrease the quantities of items under the contract but without any change in unit price or other terms & conditions. Such variations unless otherwise


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- specified in the accompanying special conditions of contract and/or technical specification, shall not be subjected to any limitations for the individual items.
- 22.2 The contract price shall accordingly be adjusted based on the unit rates available in the contract for the change in quantities as above. The base unit rates as identified in the contract shall however remain constant during the currency of the contract. In case the unit rates are not available for the change in quantity the same shall be subject to mutual agreement.
23. COOPERATION WITH OTHER CONTRACTORS AND CONSULTING ENGINEERS
The contractor shall agree to cooperate with the owner's other contractor and consulting Engineer and freely exchange with them such technical information as is necessary to obtain the most efficient and economical design and to avoid unnecessary duplication of efforts. The owner shall be provided with copies of all correspondence addressed by the contractor to other contractors and consulting Engineer of the owner in respect of such exchange of technical information.
24. NO WAIVER OF RIGHTS
Neither the inspection by the owner or any of their officials, employees, or agents nor any order by the owner for payment of money or any payment for or acceptance of the whole or any part of the works by the owner nor any extension of time nor any possession taken by the owner shall operate as a waiver of any provision of the contract, or of any power herein reserved to the owner or any right to damage herein provided nor shall any waiver of any breach in the contract be held to be a waiver of any other or subsequent breach.
25. CERTIFICATE NOT TO AFFECT RIGHT OF OWNER AND LIABILITY OF CONTRACTOR
No interim payment certificate of the owner nor any sum paid on account by the owner nor any extension of time for execution of the works granted by the owner shall affect or prejudice the rights of the owner against the contractor or relieve the contractor of his obligation for the due performance of the contract, or be interpreted as approval of the works done or of the equipment furnished and no certificate shall create liability for the owner to any alterations, amendments variations or additional works not ordered in writing by the Engineer or discharge the liability of the contractor for the payment of damages whether due ascertained or certified or not or any sum against the payment of which he is bound to indemnify the owner, nor shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of owner against the contractor.
26. PROGRESS REPORTS AND PHOTOGRAPHS
During the various stages of the contract, the contractor shall at his own cost submit weekly progress reports on every Monday as may be reasonably required by the owner with such materials as charts networks, photographs, test certificates etc. Such progress reports shall be in the form and size as may be required by the owner and shall be submitted through email or hard copies as desired by PSTCL.
27. TAKING OVER
Upon successful completion of all the protection testing and commissioning by PSTCL at site on equipments furnished and erected by the contractor, the owner shall issue to


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the contractor a taking over certificate as a proof of the final acceptance of the equipment. Such certificate shall not unreasonably be withheld nor will the owner delay the issuance thereof on account of minor omissions of defects which do not affect the commercial operation and/or cause any serious risk to the equipment. Such certificate shall not relieve the contractor of any of his obligations which otherwise survive by the terms & conditions of the contract after issue of such certificate.

CONTRACT SECURITY AND PAYMENTS

28. CONTRACT PERFORMANCE GUARANTEE

The contractor shall furnish contract performance guarantee(s)/ bank guarantee for the proper fulfilment of the contract in the prescribed form within 30 days of Notice of Award of Contract/ letter of award/ allotment (whichever earlier). Successful bidder is required to submit 10% of the total final contract price as Security in the form of Bank Guarantee within 30 days from award of contract. On faithful execution of contract in all respect the security deposit shall be refunded after 90 days of the expiry of warranty period/ defect liability as provided in the contract. The performance guarantee(s) shall be as per terms prescribed in General Conditions of Contract and Special Conditions of Contract.

29. CONTRACT PRICE ADJUSTMENT

Price payable to the contractor shall be fixed and there shall be no price adjustment.


30. CONSIDERATION OF COMPELTION OF ACTIVITY FOR PAYMENT PURPOSES-

- The payment may be claimed for activity as defined in the BOQ only on completion of that activity.
- The activity shall be considered completed for commissioning only after successful protection testing of it in all respects by PSTCL protection wing.
- In case, the protection testing is found pending due to non-availability of protection team of PSTCL after written intimation/ request by bidder, the same shall be considered delay due to PSTCL end and the given written intimation/ request for the protection testing after completing the activity/ sub-activity shall then be considered for payment for that activity subject to physical checking by Er.-in-charge.

31. ENTITLEMENT FOR WATCHMAN EXPENSES-

- From date of allotment of the contract to the bidder to the final completion of contract (including all holidays, all day and nights etc.) & handing over to PSTCL, no charges for any watchman shall be payable to bidder by PSTCL as the watch & ward (including care and custody of handed over material etc.) shall be the responsibility of bidder only. The bidders are advised to quote rates accordingly. No requests in this regard shall be entertained at any later stage.
- However, if the bidder has completed all the work under contract and have informed testing authority for the same but the commissioning/ handing over is pending due to PSTCL end delay/ non-availability of protection team after written intimation/ request by bidder to PSTCL for final protection testing, the bidder may claim expenses for the 02 No. watchman per day on applicable DC rates for unskilled workers from the day of intimation to concerned authority.
- Only the period from receipt of written intimation/ request from bidder for final protection testing (after completion of contract activities in all respects) to the date of start of final protection testing by protection team, will be considered for watchman expenses.
- In case, the final protection testing does not get successful due to any observation/ pending


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work (major or minor) etc., Contractor will be provided 15 days grace period to complete/remove shortcomings and if he is unable to do so in the grace period then the previous period will not be considered for watchman expenses till the period from receipt of re-written intimation/ re-request from bidder for final protection testing again after rectification of all the faults/ completion of pending works etc.

- e. These watchman expenses are liable to be paid only in case of earlier completion of all works under the contract. No such charges shall be paid if the maximum allowed time duration as per contract gets elapsed before completion of all activities/ sub-activities under the contract.

32. PAYMENT

- 32.1 The payment to the contractor for the performance of the works under the contract will be made by the owner as per the guidelines and conditions specified herein. All payment made during the contract shall be on account payments only for 90% of amount. The final payment of 10% will be made on completion of all works and taking over by PSTCL and on fulfilment by the Contractor of all his liabilities under the contract.
- 32.2 Contractor will be eligible for claiming payment through running bills as per Technical specifications/Scope of work as per section V of DNIT. The contractor will raise the bill only for complete activity completed in all respects which will be ready & intimated for protection testing / commissioning. However, contractor will not be eligible for claiming any bill against any sub-activity.
- 32.3 After clearing the respective activity, bill of complete activities may be raised by the bidder. However, the running bills for any partly completed individual activity without fulfilment of completion of whole quantity of activity, may also be raised. But the decision of payment for running bill to release the payment shall be taken by PSTCL. In case of running bills for uncompleted activity in all respects, PSTCL may decide to release amount in any proportion or to deny for release amount as per actual conditions. However, the deduction of 5% amount of that bill as additional security be deducted from the bills, if PSTCL decides to release payment against running bills and shall be refunded on completion of whole activity.
- 32.4 The payment shall be done on receipt of successful completion documents after successful verification by Er.-in-charge.
- 32.5 It would be the responsibility of contractor to submit all documents required for release of payment along with 01 set of bills (in original) and minimum 02No. copies of bills (duly attested by contractor/ bidder).

33. CURRENCY OF PAYMENT

All payments under the contract shall be in Indian Rupees Only.

33.1 MODE OF PAYMENT

Payment shall be made by the owner directly as per prevalent practices/ rules and regulations of PSTCL.

34. DEDUCTION FROM CONTRACT PRICE

All costs, damages or expenses which the owner may have paid for which under the contract the contractor is liable will be claimed by the owner. All such claims shall be billed by the owner to the contractor regularly as and when they fall due. Such bills shall be supported by appropriate and certified vouchers or explanations to enable the contractor within 30 days of the receipt of the corresponding bills and if not paid by the


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contractor within the said periods the owner may then deduct the amount from any monies due or becoming due by him to the contractor under the contract or may be recovered by actions of law or otherwise.

35. INSURANCE

- 35.1 The contractor at his cost shall arrange, secure and maintain all insurance as may be pertinent to the works and obligatory in terms of law to protect his interest and interests of the owner against all perils detailed herein. The form and limit of such insurance as defined herein together with the underwriter in each case shall be acceptable to the owner. However, irrespective of such acceptance, the responsibility to maintain adequate insurance coverage at all time during the period of contract shall be of Contractor alone. The contractor's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. The insurance covers to be taken by the contractor shall be in a joint name of the owner and the contractor. The contractor shall however be authorized to deal directly with insurance company or companies and shall be responsible in regard to maintenance of all insurance covers.
- 35.2 Any loss or damage to the equipment during handling, transportation, storage, erection, putting into satisfactory operation and all activities to be performed till the successful completion of commissioning of the equipment shall be to the account of the contractor. The contractor shall be responsible for preference of all claims and make good the damages or loss by way of repairs and/or replacement of the equipment, damaged or lost. The transfer to title shall not in any way relieve the contractor of the above responsibilities during the period of contract. The contractor shall provide the owner with copy of all insurance policies and documents taken out by in pursuance of the contract. Such copies of documents shall be submitted to the owner immediately after such insurance coverage. The contractor shall also inform the owner in writing at least sixty days in advance regarding the expiry/cancellation and/or change in any of such documents and ensure revalidation renewal etc. as may be necessary well in time.
- 35.3 The responsibility and liability of all the equipment/ material upto its cost shall be of contractor only when material/ equipment is withdrawn from PSTCL store and handed over to contractor by PSTCL. In any case of damage, the contractor shall be responsible.
- 35.4 All costs on account of insurance liabilities covered under the contract will be on contractor's account and will be included in quoted price/ contract price. However the owner may from time to time during the pendency of the contract, ask the contractor in writing to limit the insurance coverage, risks and in such a case the underwriters, the contractor shall be liable to make good the full replacement/rectification value of all equipment/materials and to ensure their availability as per project requirement.
- 35.5 The clause entitled 'Insurance' under Erection Conditions of Contract covers the additional insurance requirements for the portion of the works to be performed at the site.
- 35.6 **Insurance of P/T/F-** Insurance of PTF shall be in bidder's scope for covering the job of unloading, placing to final erection place, erection etc. The risk, liability up to the cost of PTF (i.e. upto FOR destination value of P/T/F) shall be in bidder's scope. PSTCL shall not be responsible for any damage to P/T/F, allied equipment or any other station property.

36. LIABILITY FOR ACCIDENTS AND DAMAGES

Under the contract, the contractor shall be responsible for loss or damage to the material, equipment, Substation etc. until the successful completion of commissioning as defined elsewhere in the bid documents.


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37. DELAYS BY OWNER OR HIS AUTHORISED AGENTS

37.1 In case the contractor's performance is delayed due to any act of omission on the part of the owner or his authorized agents, then the contractor shall be given due extension of time for the completion of the works, to the extent such omission on the part of the owner has caused delay in the contractor's performance of the contract. Regarding reasonableness or otherwise of the extension of time the decision of the owner shall be final.

37.2 In addition, the contractor shall be entitled to claim demonstrable and reasonable compensation if such delays have resulted in any increase in cost. The owner shall examine the justification for such a request for claim and if satisfied the extent of compensation shall be mutually agreed depending upon the circumstances at the time of such an occurrence.

38. DEMURRAGE, WHARFAGE, ETC.

All demurrage, wharfage and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the contractor.

39. FORCE MAJEURE

39.1 Force majeure is herein defined as any cause which is beyond the control of the contractor or the owner as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which subsequently affects the performance of the contract, such as;

- a) Natural phenomena, including but not limited to floods, droughts, earthquake and epidemics.
- b) Acts of any Govt. domestic or foreign including but not limited to war declared or undeclared, priorities, guarantees, embargoes.

Provided that written notice of the happening of any such eventuality is given by either party to the other within 15 days from the date of occurrence thereof.

The date of completion will subject to hereinafter provided be extended by reasonable time even though such cause may occur after contractor's performance of obligation has been delayed due to other causes.

39.2 The contractor or the owner shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/or defined above. Appropriate extension in time of completion shall be granted.

40. SUSPENSION OF WORK

40.1 The owner reserves the right to suspend and reinstate execution of the whole or any part of the works without invalidating the provisions of the contract. Orders for suspension or reinforcement of the works will be issued by the owner to the contractor in writing. The time for completion of the works will be extended for a period equal to duration of the suspension.

40.2 Any necessary and demonstrable cost incurred by the contractor as a result of such suspension of the works will be paid by the owner, provided such costs are substantiated to the satisfaction of the owner. The owner shall not be responsible for any liabilities if suspension or delay is due to some default on the part of the contractor or his sub-contractor.

41. CONTRACTOR'S DEFAULT

41.1 If the contractor shall neglect to execute the works with due diligence or shall refuse or


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neglect to comply with any reasonable order given to him by the owner in connection with the works or shall contravene the provision of the contract, the owner may give notice in writing to the contractor to make good the failure, neglect or contravention complained of. Should the contractor fail to comply with the notice within 21 days from the date of serving the notice, then and in such case the owner shall be at liberty to employ other workmen and forthwith execute such part of the works as the contractor may have neglected to do or if the owner shall think fit, without prejudice to any other right he may have under the contract to take the work wholly or in part out of the contractor's hands and re-contract with any other person or persons to complete the works or any part thereof and in that event the owner shall have free use of all contractor's equipment that may have been at the time on the site in connection with the works or any part thereof without being responsible to the contractor for fair wear and tear thereof and to the exclusion of any right of the contractor over the same and the owner shall be entitled to retain and apply any balance which may otherwise be due on the contract by him to the contractor or such part thereof as may be. If the cost of completing the works or executing a part thereof as aforesaid shall exceed the balance due to the contractor, the contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay which the contractor shall have to pay off the completion of works is delayed.

- 41.2 In addition, such action by the owner as aforesaid shall not relieve the contractor of his liability to pay liquidated damages for delay in completion of works along with stage penalty and commitment charges paid by PSTCL.
- 41.3 Such action by the owner as aforesaid the termination of the contract under this clause shall not entitle the contractor to reduce the value of the contract performance Guarantee nor the time thereof. The contract performance Guarantee shall be valid for the full value and for the full period of the contract including Guarantee period.

42. TERMINATION OF CONTRACT ON OWNER'S INITIATIVE

The owner reserves the right to terminate the contract either in part or in full due to reasons other than those mentioned under clause entitled contractor's default. The owner shall in such an event give 15 days' notice in writing to the contractor of his decision to do so.


The contractor upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and contracts to the extent they are related to the work terminated and terms satisfactory to the owner stop all further sub-contracting and purchasing activity related to the work terminated and assist the owner in maintenance protection and disposition of the works acquired under the contract by the owner.

In the event of such a termination the contractor shall be paid compensation equitable and reasonable dictated by the circumstances prevalent at the time of termination.

If the contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the contractor is a partnership concern and one of the partners dies then unless the owner is satisfied that that legal representatives of the individual contractor or the proprietor of the propriety concern and in the case of partnership, the surviving partners are incapable of carrying out and completing the contract the owner shall be entitled to cancel the contract as to its In-completed part without being in any way liable to payment of any compensation to the estate of deceased contractor and/or to the surviving partners of the contractor's firm on account of the cancellation of the


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contract. The decision of the owner that the legal representatives of the deceased contract or surviving partners of the contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation the owner shall not hold the estate of the deceased contractor and/or the surviving partners of the estate of the deceased contractor and/or the surviving partners of the contractor's firm liable to damages for not completing the contract.

43. FRUSTRATION OF CONTRACT

43.1 In the event of frustration of the contract because of supervening impossibility in terms of Sec-56 of the Indian Contract Act, the parties shall be absolved of their responsibility to perform the balance portion of the contract.

43.2 In the event of non-availability of funds for any reasons whatsoever (except for reason of wilful or flagrant breach by the owner) and/or contractor then the works under the contract shall be suspended.

Furthermore, if the owner is unable to make satisfactory alternative agreements for financing to the contractor in accordance with the terms of the contract within 3 months of the event, the parties hereto shall be relieved from carrying out further obligations under the contract treating it as frustration of the contract.

43.3 In the event referred to in Sub-clause 41.1 and 41.2 above the parties shall mutually discuss to arrive at reasonable settlement on all issues including amounts due to either party for the work already done on quantum merit basis which shall be determined by mutual agreement between the parties.

44. GRAFT AND COMMISSIONS ETC.

Any graft, commission, gift or advantage given, promised or offered by or on behalf of the contractor or his partner, agent, officer, director employee or servant or any one on his or their behalf in relation to the obtaining or to the execution of this or any other contract with the owner shall in addition to any criminal liability which it may incur subject the contractor to the cancellation of this and all other contracts and also to payment of any loss or damage to the owner resulting from any cancellation. The owner shall then be entitled to deduct the amount so payable from any monies otherwise due to contractor under the contract.

RESOLUTION OF DISPUTES


45. SETTLEMENT OF DISPUTES

45.1 Any dispute(s) or difference(s) arising out of or in connection with the contract shall to the extent possible be settled amicably between the parties.

45.2 If any dispute or difference of any kind whatsoever shall arise between the owner and the contractor arising out of the contract for the performance of the works whether during the progress for the works or after its completion or whether before or after the termination abandonment or breach of the contract, it shall in the first place be referred to and settled by the empowered officer appointed by the owner who within a period of 30 days after being requested by either party to do so, shall give written notice of his decision to the owner and the contractor.

45.3 Unless as hereinafter provided such decision in respect of any matter so referred shall be final and binding upon the parties until the completion of the works and shall forthwith be given effect to by the contractor who shall proceed with the works with all due diligence, whether he or the owner requires arbitration as hereinafter provided or not.


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- 45.4 If after the Empowered officer has been written notice of his decision to the parties, no claim to arbitration has been communicated to him by either party within 30 days from the receipt of such notice, the said decision shall become final and binding on the parties.
- 45.5 In the event of the Empowered officer failing to notify his decision as aforesaid within 30 days after being requested aforesaid or in the event of either the owner or the contractor being dissatisfied with any such decision or within 30 days after the expiry of the first mentioned period of 30 days as the case may be, either party may require that the matters in dispute be referred to arbitration as hereinafter provided.


46. ARBITRATION

- i) If at any time any question, dispute or difference, whatsoever, shall arise between the Purchaser/Board and the Supplier/Company, upon or in relation to or in connection with the Purchase Order/Contract, either party may forthwith give to the other, notice in writing of the existence of such question, dispute or difference and the same shall be referred for Sole arbitration of a nominee of the Purchaser/Board who shall give a reasoned/speaking award. The award of the Sole Arbitrator shall be final and binding on the parties under the provisions of the Indian Arbitration Act, 1940 and of the rules there under. Any statutory amendment, modification or re-enactment thereof for the time being in force shall be deemed to apply to and be incorporated in this Contract/Purchase Order. It will not be objectionable, if the Sole Arbitrator is an officer of the Board and he has expressed his views on all or any of the matters in question of dispute or difference.
- ii) Upon every or any such reference, the cost of and incidental to the reference and award respectively shall be in the discretion of the Sole Arbitrator so appointed who may determine the amount thereof or direct the same to be taxed as between solicitor and client or as between party and party and shall direct by whom and to whom and in what manner the same is to be borne and paid.
- iii) The work under the Contract shall if reasonably possible continue during the arbitration proceedings and no payment due or payable by the PSTCL shall be withheld on account of such proceedings.

47. SHORT CLOSURE OF CONTRACT

In any case, if the work is required to be short closed due to any reason, the decision of PSTCL shall be final and the relevant charges for the work done upto that time only, shall be paid as per work and purchase regulations of PSTCL.


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SECTION-III
SPECIAL CONDITIONS OF CONTRACT

1. GENERAL INFORMATION

- 1.1 Punjab State Transmission Corporation Limited (hereafter referred to as 'The Employer/Owner') is undertaking the work, mentioned herein and in Technical Specification for the outsourcing of labour jobs for erection of new 220KV sub-station Wazirabad near Mandi-Gobindgarh.
- 1.2 The requirement conditions, appendices etc., stated in General Conditions of Contract, Bid Proposal Sheets, Technical Specifications, Data Requirement Sheets and Drawings shall apply to and shall be considered as part of this Bidding Document.
- 1.3 Unless brought out clearly, the Bidder shall be deemed to conform strictly to bid documents. All deviations from the specification shall be clearly brought out in the respective schedule of deviations. Any discrepancy between the specification and the catalogue of the bid, if not clearly brought out in the schedule, will not be considered a valid deviation.
- 1.4 The word 'Owner' wherever appears in the Bidding Documents shall be termed as 'Employer'.

2. SCOPE OF WORK AND SERVICES

- 2.1 Scope of the work shall include the loading, unloading, transportation of all material/equipment and its erection etc which is required to complete the work in all respects.


2.2 SCOPE OF SERVICES

In addition to the scope of work specified the following shall also be covered under Bidder's scope.

- Loading and unloading of material from PSTCL offices and stores to the work site of substation.
- Transportation to site and insurance liability from time of taking over by bidder from PSTCL up to final commissioning and handing over to PSTCL by bidder.
- Receiving, Unloading, handling, opening, inspection, reporting in case of damage and short supply items at time of receiving from PSTCL for erection.
- Storing at site with suitable weather protection under safe care & custody and ward & watch including all required insurances of material for storage, transportation and erection etc.
- Complete assembling, complete erection at site in all respects from material stage to final commissioning stage.
- Adjustments to rectify misalignment and defects, if any.
- Final checkup, assistance in testing & commissioning.
- Obtaining Employer's written acceptance for satisfactory performance.
- Co-ordination through the site engineer/engineers-in-charge and other contractors of PSTCL.
- Submission of final as built drawings, wiring drawings, and other all related done jobs drawings to PSTCL on commissioning in atleast 05 hard copies and 05 soft copies in form of DVD/CD.

Bidders are required to quote for the entire scope of work as defined in Bid Sheets completely. Offer for incomplete or part scope of work is not acceptable and shall be summarily rejected. The erection shall conform to the latest edition of relevant Indian Standards/IEC specifications or any other recognized international standards except in so far as modified by the specification.


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3. PRICES:

Bidders shall quote their prices on FOR site basis for site of work including all type of charges which are not specifically mentioned in the bids Performa.

4. PRICE BASIS-

Price quoted shall be on Firm Price basis. No Price escalation shall be applicable during execution of the contract.

5. TAXES & DUTIES

5.1 Taxes and duties shall be payable by Bidder.

All custom duties, Excise duties, Sales tax, Octroi and other levies payable by the bidders in respect of the transaction between the bidders and their vendors/sub-vendors, either while procuring any components, sub-assemblies, raw material and equipment for their own consumption or dispatched directly from their vendors/sub-vendor's works or godown to the site, shall be included in the Ex-works bid price and no claim on this behalf will be entertained by the employer.

5.2 Sales tax (but not surcharge in lieu of sales tax), excise duty, local taxes and other levies in respect of the transaction between the employer and the contractor under the contract for the items manufactured by them and dispatched from their manufacturing works to site directly shall be indicated separately wherever applicable in the relevant price schedules.

5.3 Notwithstanding the provisions stated above, all applicable taxes, duties and other levies such as excise duty, sales tax, octroi etc. shall be included in the ex-works price of bus materials/ bay work and civil works and no claim in this behalf will be entertained by the employer.

5.4 No taxes shall be payable by PSTCL except the taxes (i.e. GST) specifically mentioned in the price bid

6. WORK SCHEDULE

"The final completion thereof shall be completed within stipulated timeline which is to be submitted by bidder at time of bidding. However, maximum time allowed shall be 180 days for completion of all the jobs/ activities and final handing over/ taking over

The contractor shall submit schedule of shut downs (if any) and requirement of civil foundations in line with activity schedule to the nodal officer by at-least 07 days in advance in writing. If any delay occurs in approval of shutdowns or availability of civil foundations, that period of delay shall be excluded while calculating the total time taken by the contractor for completion of work.

For this project, AEE level officer will be Er.-in-charge/ site officer-in-charge & Addl. SE/ Sr. XEN will be Nodal Officer to supervise & coordinate the erection, testing & commissioning of complete substation and issue the satisfactory testing & commissioning reports after successful testing by concerned protection team(s). The nomination of said officers shall be intimated at later stage by PSTCL.


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SECTION-IV
ERECTION CONDITION OF CONTRACT

- 1.0 GENERAL
- 1.1 The following shall supplement the conditions already contained in the other parts of these specifications and document and shall govern the portion of the work of this Contract to be performed at site.
- 1.2 The Contractor upon signing of the Contract shall in addition to a Project co-ordinator, nominate another responsible officer as his representative at Site suitable designated for the purpose of overall responsibility and co-ordination of the works to be performed at Site. Such person shall function from the Site office of the Contractor during the pendency of Contract. The information and contact details of the same shall require to be submitted to PSTCL in written on the day of signing contract.
- 2.0 REGULATION OF LOCAL AUTHORITIES AND STATUTES
- 2.1 The Contractor shall comply with all the rules and regulation of local authorities during the performance of his field activities. He shall also comply with Minimum Wages ACT, 1948 and the Payment of Wages ACT (both of the Government of India) and the rules made there under in respect of any employee of workman employed or engaged by him or his Sub-Contractor.
- 2.2 All registration and statutory inspection fees, if any, in respect of his work pursuant to this Contract shall be to the account of the Contractor. However, any registration, statutory inspection fees lawfully payable under any statutory laws and its amendments from time to time during erection in respect of the equipment ultimately to be rearranged due to the fault of the Contractor or his Sub contractor, the additional fees to such inspection and/or registration shall be borne by the Contractor.
- 3.0 OWNER'S LIEN OF EQUIPMENT
- The owner shall have lien on all equipment including those of the contractor brought to the site for the purpose of erection, testing and commissioning of the equipment throughout the period of Contract. No material brought to the Site shall be removed from the Site by the Contractor and/or his Subcontractors without the prior written approval of the owner.
- 4.0 INSPECTION, TESTING AND INSPECTION CERTIFICATE
- The provisions of the clause entitled inspection, Testing and Inspection Certificate under Technical specification, shall also be applicable to the erection portion of the works. The owner shall have the right to re-inspect any equipment and after the same are erected at site. If by the above inspection, the owner rejects any equipment the contractor shall make good for such rejection either by replacement or modification/repairs as may be necessary to the satisfaction of the owner. Such replacement/ repair will also include the replacement or re- execution of such of these works of other contractors and/or agencies, which might have got damage or affected by the replacement or re-works done to the contractors work.
- 5.0 ACCESS TO SITE AND WORKS ON SITE
- 5.1 Suitable access to and possession of the Site shall be afforded to the Contractor by the owner in reasonable time.
- 5.2 The owner shall have the necessary foundations to be provided by him ready, as per the agreed schedule for the execution of the individual phases of works.
- 5.3 The works so far as it is carried out on the owner's premises, shall be carried out at such time as the owner may approve and the owner shall give the contractor reasonable facilities


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for carrying-out the works.

- 5.4 In the execution of the works no person other than the Contractor or his duly appointed representative Sub-contractor and workmen shall be allowed to do work on the site, except by the special permission in writing of the owner or his representative.

6.0 CONTRACTOR'S SITE OFFICE ESTABLISHMENT

The contractor shall establish a Site Office at the Site and keep posted an authorised representative for the purpose of the Contract. Any written order or instruction of the owner or his duly authorised representative shall be communicated to the said authorised resident representative of the Contractor and the same shall be deemed to have been communicated to the contractor at his legal address.

7.0 CO-OPERATION WITH OTHER CONTRACTORS

- 7.1 The contractor shall co-operate with all other contractors or tradesmen of the owner, who may be performing other works on behalf of the owner and the workmen who may be employed by the owner and doing work in the vicinity of the works under the contract. The contractor shall also so arrange to perform his work as to minimise, to the maximum extent possible interference with the work of the contractors and their workmen. Any injury or damage that may be sustained by the employees of the other contractors and the owner due to the contractor's work shall promptly be made good at the contractor's own expense. The owner shall determine the resolution of any difference or conflict that may arise between the contractor and the workmen of the owner in regard to their work. If the work of the contractor is delayed because of any acts of omission of another contractor, the contractor shall have no claim against the owner on that account other than an extension of time for completing his works.
- 7.2 The owner shall be notified promptly by the contractor of any defects in the other contractor's work that could affect the contractor's works. The owner shall determine the corrective measures, if any, required to rectify this situation after inspection of the work and such decisions by the owner shall be binding on the contractor.

8.0 DISCIPLINE OF WORKMEN

The contractor shall adhere to the disciplinary procedure set by the owner in respect of his employees and workmen at site. The owner shall be at liberty to object to the presence of any representative or employee of the contractor at the site, if in the opinion of the owner such employee has mis-conducted himself or is incompetent or negligent or otherwise undesirable and then the contractor shall remove such a person objected to and provide in his place a competent replacement.

9.0 CONTRACTOR'S FIELD OPERATION

- 9.1 The contractor shall keep the owner informed in advance regarding his field activity plans and schedules for carrying out each part of the works. Any review of such plan or schedule or method of work by the owner shall not relieve the contractor of any of his responsibilities towards the as an assumption of any risk or liability by the owner or any of his representative and no claim of the contractor will be entertained because of the failure or inefficiency of any such plan or schedule or method or work reviewed. The contractor shall be solely responsible for the safety, adequacy and efficiency of plant and equipment and his erection methods.
- 9.2 The contractor shall have the complete responsibility for the conditions of the Work-Site


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Including the safety of all persons employed by him or his Sub-contractor and all the properties under his custody during the performance of the work. The requirement shall apply continuously till the completion of the contract and shall not be limited to normal working hours. The construction review by the owner is not intended to include review of contractor's safety measures in or near the work site and their adequacy or otherwise.

10.0 MAN POWER REPORT

- 1.1 The contractor shall submit to the owner on the first day of every month, a man hour schedule for the month, detailing the man hours scheduled for the month, skill wise and area wise.
- 1.2 The contractor shall also submit to the owner, on the first day of every month, a man power report of the previous month detailing the number of persons scheduled to have been employed and actually employed, skill wise and areas of employment of such labour.

11. PROTECTION OF WORK

The contractor shall have total responsibility for protecting his works till it is finally taken over by the owner. No claim will be entertained by the owner for any shall be responsible for complete restoration of the damaged works to original conditions to comply with the specifications and drawings, should any such damage of the contractor's works occur because of any other party not being under his supervision or control. The contractor shall make his claim directly with the party concerned. If disagreement or conflict or dispute develops between the contractors and the other party or parties concerned regarding the responsibility for damage to the contractor's works the same shall be resolved as per the provisions of the clause 7.0 above entitled "Cooperation with other Contractors". The contractor shall not cause any delay in the repair of such damaged works because of any delay in the resolution of such dispute. The contractor shall proceed to repair the work immediately and no cause thereof will be assigned pending resolutions of such disputes.

13.0 EMPLOYMENT OF LABOUR

- 13.1 The contractor will be expected to employ on the work only his regular skilled employees with experience of his particular work. No labour shall be employed after darkness. No person below the age of eighteen years shall be employed.
- 13.2 All travelling expenses including provisions of all necessary transport to from site, lodging allowances and other payments to the contractor's employees shall be the sole responsibility of the contractor.
- 13.3 The hours of work on the Site shall be decided by the owner and the contractor shall adhere to it. Working hours will normally be eight (8) hours per day- Monday through Saturday.
- 13.4 The contractor's employees shall wear identification badges, safety gadgets etc. while on work at site.
- 13.5 In case the owner becomes liable to pay any wages or dues to the labour or any Government agency under any of the provisions of the Minimum Wages Act Workmen Compensation Act. Contract Labour Regulation Abolition Act or any other law due to act of omission of the contractor, the owner may make such payment and shall recover the same from the contractor's bills.

14.0 FACILITIES TO BE PROVIDED BY THE OWNER

14.1 SCOPE

Land for Contractor's temporary Office, Store, and Workshop etc.


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- a) The owner shall at his discretion and for the duration of execution of the contract make available at site, land for construction of contractor's field office, workshop, stores, magazines for explosives in isolated locations, assembling yard etc required for execution of the contract. Any construction of temporary roads, office, workshop, etc as per plan approved by the owner shall be done by the contractor at contractor's cost.
- b) On completion of work the contractor shall hand over the land duly cleaned to the owner. Until and unless the contractor has handed over the vacant possession of land allotted to him for the above purpose the payment of his final bill shall not be made. The contractor shall be made liable to pay for the use and occupation at the rates to be determined by the owner if the contractor over stays in the land after the contract is completed.

15.0 FACILITIES TO BE PROVIDED BY THE CONTRACTOR

15.1 ELECTRICITY POWER SUPPLY:

Power supply for cutters, welding machines, drilling holes, erection of Substation material/ equipment etc. and for any other allied auxiliary work will be arranged by the bidder from any of the nearby electricity utility office at bidders cost. However in addition the bidder should maintain alternative source of power by DG set to meet out continuous power supply availability as well as any such emergency. Each contractor shall provide and install all necessary transformers, switchgear, lighting fixtures, bulbs and other temporary equipment for further distribution and utilization of energy for power and lighting and shall remove the same on completion of the work. However, Bidder may ask help for providing such facilities on chargeable basis from the owner. But in case, owner is not able to provide such help, contractor shall himself be responsible to arrange the same without claiming any re-imbursment from PSTCL.

15.2 WATER

This will be arranged by the owner for erection/construction activities. But in case, owner is not able to provide such help, contractor shall himself be responsible to arrange the same without claiming any re-imbursment from PSTCL.

15.3 TOOLS, TACKLES AND SCAFFOLDING

The contractor shall provide all the construction equipment, tools, tackles and scaffoldings required for preassembly, erection, testing and commissioning of the equipment covered under the contract. He may be asked to submit a list of all such material to their owner before the commencement of pre-assembly at site. These tools and tackles shall not be removed from the site without the written permission of the owner.

The Dehydration set will be arranged by bidder. Also, the tests of Transformer oil to be conducted in ODTL lab of PSTCL and this will be responsibility of contractor to get the tests done from time to time.

15.4 COMMUNICATION

This is to be arranged by the bidder for erection/construction activities. However, Bidder may ask help for providing such facilities on chargeable basis from the owner. But in case, owner is not able to provide such help, contractor shall himself be responsible to arrange the same.

15.5 FIRST AID

The contractor shall provide necessary first aid facilities for all his employees, representative


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and workmen working at the site. Enough number of contractor's personnel shall be trained in administering first aid.

15.6 CLEANLINESS

- 15.6.1 The contractor shall be responsible for keeping the entire area allotted to him clean and free from rubbish debris etc. during the period of contract. The contractor shall employ enough number of special personnel to thoroughly clean his work-area at least once in a day. All such rubbish and scrap material shall be stacked or disposed in a place to be identified by the owner. Material and stores shall be so arranged to permit easy cleaning of the area. In areas where equipment might drip oil and cause damage to the floor surface, a suitable protective cover of a flame resistant, oil proof sheet shall be provided to protect the floor from such damage.
- 15.6.2 Similarly the labour colony, the offices and the residential areas of the contractor's employees and workmen shall be kept clean and neat to the entire satisfaction of the owner. Proper sanitary arrangements shall be provided by the contractor in the work areas, office and residential areas of the contractor.

16.0 LINES AND GRADES

All the works shall be performed to the lines, grades and elevations indicated on the drawings. The contractor shall be responsible to locate and layout the works. Basic horizontal and vertical control points will be established and marked by the owner at site at suitable points. These points shall be used as datum for the works under the places at which he wishes to do work in the area allotted to him so that suitable datum points may be established and checked by the owner to enable the contractor to proceed with his works. Any work done without being properly located may be removed and/or dismantled by the owner at contractor's expense.

17.0 FIRE PROTECTION

- 17.1 The work procedures that are to be used during the erection shall be those which minimise fire hazards to the extent practicable. Combustible material, combustible waste and rubbish shall be collected and removed from the site at least once each day. Fuels, oils and volatile or inflammable material shall be stored away from the construction and equipment and material storage areas in safe containers, untreated material shall not at all be used at site for any other purpose unless otherwise specified if any such material are received with the equipment at the site, the same shall be removed and replaced with acceptable material before moving into the construction or storage area.
- 17.2 Similarly corrugated paper fabricated cartons etc. will not be permitted in the construction area either for storage or for handling of material all such material used shall be of waterproof and flame resistant type. All the other material such as working drawings, plans etc. which are combustible but are essential for the works to be executed shall be protected against combustion resulting from welding sparks, cuttings flames and other similar fire sources.
- 17.3 All the contractor's supervisory personnel and sufficient number of workers shall be trained for fire fighting and shall be assigned specific fire protection duties. Enough of such trained personnel must be available at the site during the entire period of the contract.
- 17.4 The contractor shall provide enough fire protection equipment of the types and number for the ware house, office, temporary structures, labour colony area etc. Access to such fire protection equipment shall be easy and kept open all time.


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17.5 All insurances related to protection from fire incidents shall be in contractor's scope.

18.0 SECURITY

The contractor shall have total responsibility for all equipment and material in his custody/store, semi-assembled and/or erected by him at site. The contractor shall make suitable security arrangements including employment of security personnel to ensure the protection of all material equipment and works from theft, fire, pilferage and any other damages and loss. All material of the contractor shall enter and leave the project site only with the written permission of the owner in the prescribed manner.

19.0 CONTRACTOR'S AREA LIMITS

The owner may mark out the boundary limits of access roads, parking spaces, storage and construction areas for the contractor and the contractor shall not trespass the area not marked out for him. The contractor shall be responsible to ensure that his personnel move out of the areas marked out for his operations. In case of such a need for the contractor's personnel to work out of the areas marked out for him, the same shall be done only with the written permission of the owner.

20.0 CONTRACTOR'S CO-OPERATION WITH THE OWNER

In case where the performance of the erection work by the contractor affects the operation of the system facilities of the owner such erection work of the contractor shall be scheduled to be performed only in the manner stipulated by the owner and the same shall be acceptable at all times to the contractor. The owner may impose such restrictions on the facilities provided to the contractor such as electricity, water etc. as he may think fit in the interest of the owner and the contractor shall strictly adhere to such restrictions and co-operate with the owner. It will be the responsibility of the contractor to provide all necessary temporary instrumentation and other measuring devices required during start-up and operation of the equipment systems which are erected by him. The contractor shall also be responsible for flushing and initial filling of all the oil and lubricants required for the equipment furnished and erected by him, so as to make such equipment ready for operation. The contractor shall be responsible for supplying such flushing oil and other lubricants.

21.0 PRE-COMMISSIONING TRIALS AND INITIAL OPERATION

The pre-commissioning trials and initial operations of the equipment furnished and erected by the contractor shall be the responsibility of the contractor. The contractor shall provide in addition test instruments, calibrating devices, etc. and labour required for successful performance of these trials. If it is anticipated that the above test may prolong for a long time, the contractor's workmen required for the above test shall always be present at site during such detail.

22.0 MATERIAL HANDLING AND STORAGE

22.1 All the equipment furnished under the contract and departing & arriving from stores/ PSTCL stores at site shall be promptly received, loaded/ unloaded, transported and stored in the storage by the contractor.

22.2 Contractor shall be responsible for examining all the shipment and notify the owner immediately of any damage, shortage, discrepancy etc. for the purpose of owner's information only. The contractor shall submit to the owner every week report detailing all


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- the receipt during the week. However the contractor shall be solely responsible for any shortages or damage in transit, handling and/or in storage and erection of the equipment at site. Any demurrage, wharf age and other such charges claimed by the transporters, railways etc. shall be to the account of the contractor.
- 22.3 The contractor shall maintain an accurate and exhaustive record detailing out the list of all equipment received by him for the purpose of erection and keep such record open for the inspection of the competent authority/ nominated Engineer/ Engineer-in-charge of the owner.
- 22.4 All equipment shall be handled very carefully to prevent any damage or loss. No bare wire ropes, slings etc. shall be used for unloading and/or handling of the equipment without the specific written permission of the owner. The equipment stored shall be properly protected to prevent damage either to the equipment or the floor where they are stored. The equipment from the store shall be moved to the actual location at the appropriate time so as to avoid damage of such equipment at site.
- 22.5 All electrical panels, control gears, motors and such other devices shall be properly dried by heating before they are installed and energised. Motor bearings, slip ring, commutators and other exposed parts shall be protected against moisture ingress and corrosion during storage and periodically inspected.
- 22.6 All the electrical equipment such as motors generators etc shall be tested for insulation resistance at least once in a month from the date of receipt till the date of commissioning and a record of such measured insulation values maintained by the contractor. Such records shall be open for inspection by the owner.
- 22.7 The contractor shall ensure that all the packing material and protection devices used for the various equipments during transit and storage are removed before the equipment are installed.
- 22.8 The consumable and other supplies likely to deteriorate due to storage must be thoroughly protected and stored in a suitable manner to prevent damage or deterioration in quality by storage.
- 22.9 All the material stored in the open or dusty location must be covered with suitable weather-proof and flame proof covering material wherever applicable.
- 22.10 If the material belonging to the contractor are stored in areas other than those earmarked for him, the owner will have the right to get it moved to the area earmarked for the contractor at the contractor's cost.
- 22.11 The contractor shall be responsible for making suitable indoor storage facilities to store equipment, which require indoor storage. Normally all the electrical equipment such as motors, control gear, generators, exciters and consumables like electrodes, lubricants etc. shall be stored in the closed storage space the owner in addition may direct the contractor to move certain other material which in his opinion will require indoor storage areas, to indoor storage areas which contractor shall strictly comply with.
- 23.0 CONSTRUCTION MANAGEMENT
- 23.1 The field activities of the contractors working at site will be coordinated by the owner and the owner's decision shall be final in resolving any disputes or conflicts between the contractor and other contractors and tradesman of the owner regarding scheduling and co-ordination of work. Such decision by the owner shall not be a cause for extra compensation or extension of time for the contractor.
- 23.2 The owner shall hold fortnightly meeting of all the contractors working at site at a time and place to be designed by the site engineer. The contractor shall attend such meeting and take


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notes of discussions during the meeting and the decision of the owner and shall strictly adhere to those decisions in performing his works. In addition to the above monthly meeting, the owner may call for other meeting either with individual contractors or with selected number of contractors and in such a case the contractor will also attend such meetings.

- 23.3 Time is the essence of the contract and the contractor shall be responsible for performance of his works in accordance with the specified construction schedule. If at any time the contractor is falling behind the schedule, he shall take necessary action to make good for such delays by increasing his work force or by working overtime or otherwise accelerate the progress of the work to comply with the schedule and shall communicate such actions in writing to the owner satisfying that his action will compensate for the delay. The contractor shall not be allowed any extra compensation for such action. In case the contractor fails to execute the works as per schedule, the stage penalty as well as commitment charges levied by Financing Agency upon PSTCL if any for delay in drawl of loan will be recovered for the contractor as per provisions in Special Conditions of contract.
- 23.4 The owner shall however not be responsible for provision of additional labour and/or supply or any other services to the contractor except for the coordination work between various contractors various contractors as set out earlier.

24.0 FIELD OFFICE RECORDS

The contractor shall maintain at his site office upon to date copies of all drawings, specifications and other contract documents and any other supplementary data complete with all the latest revision thereto. The contractor shall also maintain in addition the continuous record of all changes to the above contract documents, drawings, specifications, supplementary data etc. effected at the field and on completion of his total assignment under the field and on completion of his total assignment under the contract shall incorporate all such changes on the drawings and other engineering data to indicate as installed conditions of the equipment furnished and erected under the contract. Such drawings and engineering data shall be submitted to the owner in required number of copies.

25.0 CONTRACTOR'S MATERIAL BROUGHT ON TO SITE

- 25.1 The contractor shall bring to site all equipment, components, parts material, including construction equipment, tools and tackles for the purpose of the works under intimation to the owner. All such goods shall, from the time of their being, shall brought vest in the owner, but may be used for the purpose of the works only and shall not on any account be removed or taken away by the contractor without the written permission of the owner. The contractor shall nevertheless be solely liable and responsible for any loss or destruction thereof and damage thereto.
- 25.2 The owner shall have a lien on such goods for any sum or sums, which may at any item be due or owing to him by the contractor under in respect of or by reasons of the contract after giving a fifteen days notice in writing of his intention to do so, the owner shall be at liberty to sell and dispose-off any such goods, in such manner as he shall think fit including public auction or private treaty and to apply the proceeds in or towards the satisfaction of such sum or sum due as aforesaid.
- 25.3 After the completion of the works, the contractor shall remove from the site under the direction of the owner the material such as construction equipment, erection tools and tackles, scaffolding etc. with the written permission of the owner. If the contractor fails to


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remove such material within fifteen days of issue of a notice by the owner to do so then the owner shall have the liberty to dispose-off such material as detailed under clause 25.2 above and credit the proceeds thereto the account of the contractor.

26.0 PROTECTION OF PROPERTY AND CONTRACTOR'S LIABILITY

26.1 The contractor shall be responsible for any damage resulting from his operations. He shall also be responsible for protection of all persons including members of public and employees of the owner and the employees of other contractors and sub-contractors and all public and private property including structures, building, other plants and equipment and utilities either above or below the ground.

26.2 The contractor will ensure provision of necessary safety equipment such as barriers, sign-boards, warning lights and alarms, etc. to provide adequate protection to persons and property. The contractor shall be responsible to give reasonable notice to the owner of public or private property and utilities when such property and utilities are likely to get damaged or injured during the performance of his works and shall make all necessary arrangement with such owner, related to removal and/or replacement or protection of such property and utilities.

27.0 PAINTING

All exposed metal parts of the equipment including piping, structures railing etc. wherever applicable after installation unless otherwise surface protected shall be first painted with at least one coat of primer which matches the shop primer paint used, after thoroughly cleaning all such parts of all dirt, rust, scales, grease, oil and other foreign material by wire brushing, scraping or sand blasting and the same being inspected and approved by the owner for painting. Afterwards, the above parts shall be finished painted with two coats of allowed resin machinery enamel paints. The quality of the finish paint shall be as per the standards of ISI or equivalent and shall be of the colour as approved by the owner. It is also made clear that the phase marking in whole grid/ substation on all equipment/ important places as per requirement will be done by contractor without any additional cost. The green painting of earthing points of MS flat/ Flat raisers shall also require to be done by contractor considering it in the already listed BOQ rates. Accordingly, wherever, any painting requirement for phase marking, blackening, greening etc., the same is the part of erection of equipment/ material in BOQ. No additional cost/ charges shall be payable by owner to contractor for same even not specified in tender. It includes Loading all material like paint etc. from PSTCL store/ concerned S/D office, transportation to site of work and unloading at site, complete marking of phases RYB and Neutral as and where required in yard area, control room etc., painting Green colour on all earth bends, MS flat raisers, earthing points (as and where applicable) etc. without any additional cost.

28.0 INSURANCE- The contractor himself be responsible for all insurances related to material storage, transportation etc. and for the working staff/ workmanship etc. PSTCL shall have no liability directly or indirectly and shall pay no any charges for the same.

28.1 Workmen's compensation insurance


This insurance shall protect the contractor against all claims applicable under the workmen's compensation against claim for Injury, disability, disease or death of his sub-contractor's employee which for any reason are not covered under the workmen's compensation Act, 1948. The liabilities shall not be less than:

Workmen's compensation

As per statutory provision


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Employee's liability

As per statutory provision

28.2 Comprehensive Automobile Insurance

This insurance shall be in such a form to protect the contractor against all claims for injuries, disability, disease and death to members of public including the owner's men and damage to the property of other arising from the use of motor vehicles during on or off the site operations irrespective of the ownership of such vehicles.

28.3 Comprehensive General Liability Insurance

The insurance shall protect the contractor against all claims arising from injuries, disabilities, disease or death of members of public or damage to the property of others, due to any act or omission on the part of the contractor, his agents, his employees, his representative and sub-contractor's or from riots, strikes and civil commotion. This insurance shall also cover all the liabilities of the contractor arising out of all the clauses entitled defence of suits general conditions of contract-

28.3.1 The hazards to be covered will pertain to all the works and areas where the contractor his sub-contractors, his agents and his employees have to perform work pursuant to the contract.

28.4 The above are only illustrative list of insurance covers normally required and it will be responsibility of the contractors to maintain on necessary insurance coverage to the extent both in time and amount to take care of or his liabilities either direct or indirect in pursuance of the contract.

29.0 UNFAVOURABLE WORKING CONDITIONS

The contractor shall confine all his field operations to those works which can be performed without subjecting the equipment and material to adverse effect during bad weather conditions, like monsoon storms etc. and during other unfavourable construction conditions. No field activities shall be performed by the contractor under condition, which might adversely affect the quality and efficiency thereof, unless special precautions of measures are taken by the contractor in a proper and concurrence of the owner. Such unfavourable construction condition will in no way relieve the contractor of his responsibility to perform the works as per the schedule.

30.0 PROTECTION OF MONUMENTS AND REFERENCE POINTS

The contractor shall ensure that any such as ambiguity coins, fossils etc. which he may come across during the course of performance of his works during excavation of elsewhere are property protected and handed over to the owner. Similarly, the contractor shall ensure that the bench marks reference points etc which are marked either with the help of owner or by the owner shall not be distributed in any way during the performance of his work either during excavation of elsewhere are protected and handed over to the owner. Similarly the contractor shall ensure that the bench marks reference points etc which are marked either with the help of owner or by the owner shall not be distributed in any way during the performance of his work. If any work is to be performed which disturbed with reference, the same shall be done only after these are transferred to other suitable locations under the direction of the owner. The contractor shall provide all necessary material and assistance for such the location of reference points etc.

31.0 WORK AND SAFETY REGULATIONS

31.1 The contractor shall ensure proper safety of all the workmen, material, plant and equipments belonging to him or to owner or to others working at the site. The contractor


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- shall also be responsible for provision of all safety notice and safety equipment required both by the relevant legislation and the owner as may be deem necessary.
- 31.2 The contractor will notify well in advance to the owner of his intention to bring to the site any container filled with liquid or gaseous fuel or explosive or petroleum substance or such chemicals which may involved hazards. The owner shall have right to prescribe the conditions under which such container is to be stored, handled and used during the performance of the works and the contractor shall strictly adhere to and comply with such instructions. The owner shall have the right at his sole discretion to aspect any such container or such construction plant/equipment for which material in the container is required to be used and if in his opinion if uses is not safe he may forbid its use. No claim due to such prohibition shall be entertained by the owner and owner shall not entertain any claim of the contractor towards additional safety provisions/conditions to be provided for/constructed as per the owner's instructions.

Further any such decision of the owner shall not in any way absolve the contractor of his responsibilities and in case use of such a container or entry thereof into the site area is forbidden by the owner, the contractor shall use alternative methods with the approval of the owner without any cost implication to owner or extension of work schedule.

- 31.3 Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosives, the contractor shall be responsible for carrying out such provisions and/or storage in accordance with the rules and regulations laid down in petroleum at 1934 explosive act 1948 and petroleum and carbides manuals coverage by the Chief Inspector of explosive of India. All such storage shall have prior approval of the owner. In case any approvals are necessary from the Chief Inspector (Explosive) or any statutory authorities, the contractor shall be responsible for obtaining the same.
- 31.4 All equipment used in construction and erection by contractor shall meet Indian/International Standards and where such standards do not exist, the contractor shall ensure these to be absolutely safe. All equipment shall be strictly operated and maintained by the contractor in accordance with manufacturer's operation Manual and safety instructions and as per Guidelines/Rules of owner in this regard.
- 31.5 Periodical Examination and all tests for all lifting/hoisting equipment & tackles shall be carried out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated laws/Rules in force from time to time. A register of such examinations and tests shall be properly maintained by the contractor and will be promptly produced as and when desired by owner.
- 31.6 The contractor shall be fully responsible for the safe storage of his and his sub-contractor's radio-active sources in accordance with BARR/DAN Rules and other applicable provisions. All precautionary measures stipulated by BARR/DAN in connection with use, storage and handling of such material will be taken by contractor.
- 31.7 The contractor shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need, as may be directed by owner who will also have right to examine these safety equipment to determine their suitability, reliability, acceptability and adaptability.
- 31.8 Where explosive are to be used the same shall be used under the direct control and supervision of an expert, experienced qualified and competent person strictly in accordance with the code of Practices/Rules framed under Indian Explosives Act pertaining to handling storage and use of explosives.
- 31.9 The contractor shall provide safe working conditions to all workmen and employees at the site including same means of access, railing, stair, ladders, scaffoldings etc. The scaffoldings


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- shall be erected under the control and supervision of an experienced and competent person. For erection good and standard quality of material only shall be used by the contractor.
- 31.10 The contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the owner or other contractors under any circumstances whatsoever unless expressly permitted in writing by owner to handle such fuses, wiring or electrical equipment.
- 31.11 Before the contractor connects any electrical appliances to any plug or socket belonging to the other contractor or owner he shall.
- Satisfy the owner that the appliance is in good working condition.
 - Inform the owner of the maximum current rating, voltage and phases of the appliances.
 - Obtain permission of the owner detailing the sockets to which the appliance may be connected.
- 31.12 The owner will not grant permission to connect until he is satisfied that:
- The appliance is in good condition and is fitted with suitable plug.
 - The appliance is fitted with a suitable cable having earth conductor one of which shall be an earthed metal sheath surrounding the course.
- 31.13 No electric cable in use by the contractor/owner will be disturbed without prior permission. No weight of any description will be imposed on any cable and no ladder or similar equipment will rest against or attached to it.
- 31.14 No repair/ jumpering work shall be carried out on any live equipment. The equipment must be declared safe by the owner and a permit to work shall be issued by the owner before any repair work if carried out by the contractor. While working on electric lines/equipment whether live or dead suitable type and sufficient quantity of tools will have to be provided by the contractor to electricians/workmen.
- 31.15 The contractor shall employ necessary no. of qualified full time electricians/electrical supervisors to maintain his temporary electrical installations.
- 31.16 The contractor employing more than 250 workmen whether temporary/casuals, probationer/regular or permanent or on contract shall employ at least one full time officer exclusively as safety officer to supervise safety aspects of the equipment and workmen, who will co-ordinate with the project safety officer. In case of work being carried out through subcontractors, the subcontractor's workmen/employees will also be considered as the contractor's employees/workmen for the above purpose.
- The name and address of safety officers of contractor will be promptly informed in writing to owner with a copy of safety officer in-charge before he starts work or immediately after any change of the incumbent is made during currency of the contract.
- 31.17 In case any accident occurs during the construction/erection or other associated activities undertaken by the contractor thereby causing any minor or major or fatal injury to his employees due to any reason whatsoever, it shall be the responsibility of the contractor to promptly inform the same to the owner in prescribed form and also to all the authorities envisaged under the applicable laws.
- 31.18 The owner shall have the right at his discretion to stop the work if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipments. In such cases, the contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove short comings promptly. The contractor after stopping the specific work can if felt necessary, appeal against the order of stoppage of work to the owner within 3 days of such stoppage of work and decision of the owner in this respect shall be conclusive and binding on the contractor.


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31.19 The contractor shall not be entitled or any damages/compensation for stoppage of work due to safety reasons as provided in para 31.18 above and the period of such stoppage of work will not taken as an extension of time for completion of work and will not be the ground of waver of levy of liquidated damages.

31.20 It is mandatory for the contractor to observe during the execution of the works, requirements of safety rules which would generally include but not limited to following:

SAFETY RULES:

- a) Each employee shall be provided with introduction regarding safety by the contractor, so as to enable him to work in a safe manner.
 - b) No employee shall be given a new assignment of work unfamiliar to him without introduction as to the hazards incident there to, both to himself and his fellow employee.
 - c) Under the circumstances shall any employee hurry or take unnecessary chance when working under hazardous conditions.
 - d) Employees must not leave naked fires unattended. Smoking shall not be permitted around fire proof areas, adequate firefighting equipment shall be provided at crucial locations.
 - e) Employees under the influence of any intoxicating beverage even to the slightest degree shall not be permitted to remain at work.
 - f) There shall be a suitable arrangement at every worksite for rendering prompt and sufficient first-aid to the injured.
 - g) The stair cases and passage ways shall be adequately lighted.
 - h) The employees with working around moving machinery must not be permitted to wear loose garments. Safety shoes are recommended when working in shops or places where material or tools are likely to fall. Only experienced workers shall be permitted to go behind guard lines or to clean around energized or moving equipment.
 - i) The employees must use the standard protection equipment intended for each job. Each piece of equipment shall be inspected before and after if it is used.
 - j) Requirement of ventilation in under water working to licensed and experienced divers, use of gum boots for working in slushy or in undated conditions are essential requirement to be fulfilled.
 - k) In case of rock excavation blasting shall invariably be done through licensed plasters and other precautions during blasting and storage/transport of such material shall be observed strictly.
- 31.12 If the contractor does not take all safety precautions and/or fails to comply with the safety rules as prescribed by owner or under the applicable law for the safety for the equipment and plant as for the safety of personal and the contractor does not prevent hazardous conditions which cause injury to his employees or employees of other contractors or owners employees or any other person who are at site of adjacent there to, the contractor shall be responsible for payment of all compensation and for all other statutory obligations.

32.0 CODE REQUIREMENTS


The erection requirement and procedure to be followed during the installation of the equipment shall be in accordance with the relevant codes and accepted good engineering practice the owner's drawings and other applicable Indian recognized codes and clause of regulations of the Govt. of India.

33. CHECK OUT OF CONTROL SYSTEMS

After completion of wiring cabling (furnished under specification and laid and terminated by


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the owner), the contractor shall check out the operation of all control system for the equipment furnished and installed under these specification and documents and will be responsible to complete the same if anything not found in order.

34. CABLING

- 34.1 Cable routing is to be done in such a way that cable are accessible for any maintenance and easy identification.
- 34.2 Cables are to be laid in clean and properly dressed manner in cable trenches. However, All cables shall be supported by conduits or cables trays run in air or in cable channels. These shall be installed in exposed runs parallel or perpendicular to dominant surface with right angle turn made of symmetrical bends for fittings. When cables are run on cable trays, they shall be clamped at a minimum intervals of 2000 mm or otherwise as directed by the owner.
- 34.3 Sharp bending and kicking of cables shall be avoided. Installation of other cable like high voltage, coaxial, screened, compensating, mineral insulated shall be in accordance with the cable manufacture's recommendations, wherever cables cross roads and water, oil sewage or gas lines, special care should be taken for the protection of the cables in designing the cable channels.
- 34.4 In each cable run some extra length shall be kept at three suitable points & by providing three lops to enable three straight joints to be made, should the cable develop fault at a later date.
- 34.5 Control cable terminations shall be made in accordance with wiring diagrams, using identifying codes subject to owner's approval. Multi core control cable jackets shall be removed as required to train and terminate the conductors. The cable jacket shall be left on the cable as far as possible to the point of the first conductor branch. The insulated conductors from which the jacket is removed shall be neatly twined in bundles and terminated. The bundles shall be firmly but not tightly tied utilising plastic or nylon or specifically treated fungus protected cord made for his purpose. Control cable conductor insulation shall be secure and even.
- 34.6 The connectors for control cables shall be covered with transparent insulation sleeve so as to prevent accident contact with ground or adjacent terminals and shall preferably be terminated in Elmex terminals and washers. The insulating sleeve shall be fire resistant and shall be long enough to over pass the conductor insulation.
- 34.7 All the cables should enter in equipment or any other connecting thing through proper cable glands. No cable is to be entered anywhere without using cable gland.
- 34.8 All cables should be tied at regular spacing in trenches.
- 34.9 The cables must need to be laid properly dressed, without overlapping each other. All termination must be done through proper coding of ferules and suitable size and type of thimbles/ lugs.

34.10 Wiring

Suitably colored/marked PSTCL procured cables/ wires shall be used throughout. Wiring shall be with not less than 2.5 sq. mm Stranded copper conductor. All wiring shall be securely fixed in position and shall be so arranged as to enable connections to be easily traced and shall have small number of angles and bends. Connections to the instruments, relays, equipment etc. shall be so arranged or marked as to be neatly dressed and should not protrude in air giving it an indecent look & It should be easily traceable. The ferruling shall be as per relevant standards. At the terminals of each wire shall be provided an erinoid


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cap/ properly marked ferule which shall have engraved on it a number corresponding to that on the wiring diagram of the control panels to the remote end of the multicore cables. Separate terminal block shall be used by contractor for wiring of new added equipment in panels. All trip circuit's connection shall have additional red ferrules marked TRIP. Equipment wise/wire wise detailed amended wiring schedule including TBs detail for all panels shall be supplied to the PSTCL before the commissioning. Contractor shall be responsible for completeness of all circuits modified/rearranged during retro-fitting/ installation of RCDs/relays. Wherever AC/DC supply is required in control room/yard through sockets, contractor shall provide additional supply points with proper required fittings/wiring using PVC conduits, Kiosks (wherever required) etc.

All the wiring, Cabling & connections includes all type of connections with existing AC & DC sources through MBs along with any other required connections for completion of work, retrofitting of relays & providing connections for integration with BBPS scheme, systematically ferruling, glanding & laying out all control cables in cable trenches etc.

The double battery source operation and control must be ensured in the wiring.


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SECTION-V
SCOPE OF THE WORK/ TECHNICAL SPECIFICATIONS

Sr. No.	SCOPE OF WORK/TECHNICAL SPECIFICATIONS	Job	Unit	Percentage of work to be considered as part of total quoted work as per tender enquiry
1	<p>Erection of 220KV Line-IN bay of MGG G1 - Bassi Pathana circuit complete in all respects along with all allied equipment- (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper twin conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTs, 01 No. SF6 Circuit Breaker (including structures), 01 No. L&E Switch, 03 No. PT/CVT, 02 No. Wave/ Line traps, 02 No. Post insulators, all required marshalling boxes i.e. 01 No. T-200 type, 01 No. C-65 type, 01 No. P-25 type etc., 01 No. C&R Panel etc., 02 No. ATS-2 towers, 01No. ABS-01 beam, 01 No. AP Peak, 01 Span twin ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, MS flat, MS channel, 03 No. ASI structures, 06 No. ABSC structures, 02 No. ABSL structures, 0.4" ACSR Cond for twin jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, Marshalling boxes, all yard equipment, AC & DC resources etc.) and all other material/ equipment/ sub-jobs/ supply of all Patty items etc. which are required for final commissioning of bay etc.</p>	1	No.	6
2	<p>Erection of 220KV Line-OUT bay of MGG G1 - Bassi Pathana circuit complete in all respects along with all allied equipment- (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper twin conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTs, 01 No. SF6 Circuit Breaker (including structures), 01 No. L&E Switch, 03 No. PT/CVT, 02 No. Wave/ Line traps, 02 No. Post insulators, all required marshalling boxes i.e. 01 No. T-200 type, 01 No. C-65 type, 01 No. P-25 type etc., 01 No. C&R Panel etc., 02 No. ATS-2 towers, 01No. ABS-01 beam, 01 No. AP Peak, 01 Span twin ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, MS flat, MS channel, 03 No. ASI structures, 06 No. ABSC structures, 02 No. ABSL structures, 0.4" ACSR Cond for twin jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, Marshalling boxes, all yard equipment, AC & DC resources etc.) and all other material/ equipment/ sub-jobs/ supply of all Patty items etc. which are required for final commissioning of bay etc.</p>	1	No.	6
3	<p>Erection of 220KV Line-IN bay of MGG G1 - GGSSTPP Ropar circuit complete in all respects along with all allied equipment- (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper twin conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTs, 01 No. SF6 Circuit Breaker (including structures), 01 No. L&E Switch, 03 No. PT/CVT, 02 No. Wave/ Line traps, 02 No. Post insulators, all required marshalling boxes i.e. 01 No. T-200 type, 01 No. C-65 type, 01 No. P-25 type etc., 01 No. C&R Panel etc., 01 No. ATS-2 towers, 01No. ABS-01 beam, 01 No. AP Peak, 01 Span twin ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, MS flat, MS channel, 03 No. ASI structures, 06 No. ABSC structures, 02 No. ABSL structures, 0.4" ACSR Cond for twin jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, Marshalling boxes, all yard equipment, AC & DC resources etc.) and all other material/ equipment/ sub-jobs/ supply of all Patty items etc. which are required for final commissioning of bay etc.</p>	1	No.	6
4	<p>Erection of 220KV Line-OUT bay of MGG G1 - GGSSTPP Ropar circuit complete in all respects along with all allied equipment- (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper twin conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTs, 01 No. SF6 Circuit Breaker (including structures), 01 No. L&E Switch, 03 No. PT/CVT, 02 No. Wave/ Line traps, 02 No. Post insulators, all required marshalling boxes i.e. 01 No. T-200 type, 01 No. C-65 type, 01 No. P-25 type etc., 01 No. C&R Panel etc., 02 No. ATS-2 towers, 01No. ABS-01 beam, 01 No. AP Peak, 01 Span twin ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, MS flat, MS channel, 03 No. ASI structures, 06 No. ABSC structures, 02 No. ABSL structures, 0.4" ACSR Cond for twin jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, Marshalling boxes, all yard equipment, AC & DC resources etc.) and all other material/ equipment/ sub-jobs/ supply of all Patty items etc. which are required for final commissioning of bay etc.</p>	1	No.	6


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Sr. No.	SCOPE OF WORK/TECHNICAL SPECIFICATIONS	Job	Unit	Percentage of work to be considered as part of total quoted work, as per tender enquiry
5	<p>Erection of 220KV Bus Coupler bay complete in all respects along with all allied equipment- (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper twin conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTs, 01 No. SFG Circuit Breaker (including structures), 02 No. Post insulators, all required marshalling boxes i.e. 01 No. T-200 type, 01 No. C-65 type etc., 01 No. C&R Panel etc., 01 No. ABS-01 beam, 01 No. AP Peak, 01 Span twin ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, MS flat, MS channel, 02 No. ASI structures, 03 No. ABS-2 towers, 01 No. ABSI structures, 0.4" ACSR Condit for twin jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, Marshalling boxes, all yard equipment, AC & DC resources etc.) and all other material/ equipment/ sub-jobs/ supply of all Paddy Items etc. which are required for final commissioning of bay etc.</p>	1	No.	5
6	<p>Erection of 220KV Power Transformer Controlling bay for 160MVA Power Transformer complete in all respects along with all allied equipment- (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper twin conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTs, 01 No. SFG Circuit Breaker (including structures), 02 No. Post insulators, 03 No. Lightning Arrestors, all required marshalling boxes i.e. 01 No. T-200 type, 01 No. C-65 type etc., 01 No. C&R Panel etc., 02 No. AT5-2 towers, 03 No. ABS-01 beam, 01 No. AP Peak, 01 Span twin ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, MS flat, MS channel, 02 No. ASI structures, 03 No. ABSI structures, 0.4" ACSR Condit for twin jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, HV-LV interconnection, Marshalling boxes, all yard equipment, AC & DC resources, PTF etc.) and all other material/ equipment/ sub-jobs/ supply of all Paddy Items etc. which are required for final commissioning of bay etc.</p>	1	No.	5
7	<p>Erection of 66KV Bus Coupler bay complete in all respects along with all allied equipment- (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper Quad conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTs, 01 No. SFG Circuit Breaker (including structures), 02 No. Post insulators, all required marshalling boxes i.e. 01 No. T-100 type, 01 No. C-50 type etc., 01 No. C&R Panel etc., 01 No. CBS-01 beam, 01 No. CP Peak, 01 Span Quad ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, MS flat, MS channel, 02 No. CSI structures, 04" ACSR Condit for Quad jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, Marshalling boxes, all yard equipment, AC & DC resources etc.) and all other material/ equipment/ sub-jobs/ supply of all Paddy Items etc. which are required for final commissioning of bay etc.</p>	1	No.	3
8	<p>Erection of 66KV Power Transformer controlling LV bay for 160MVA Power Transformer complete in all respects along with all allied equipment- (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper quad conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTs, 01 No. SFG Circuit Breaker (including structures), 03 No. Lightning Arrestors, 02 No. Post insulators, all required marshalling boxes i.e. 01 No. T-100 type, 01 No. C-50 type etc., 01 No. C&R Panel etc., 02 No. CT5-1 towers, 01 No. CBS-01 beam, 01 No. CP Peak, 02 No. AT5-03 Towers, 01 No. ABS-01 beam, 01 No. AP peak, 02 Span Quad ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, MS flat, MS channel, 02 No. CSI structures, 04" ACSR Condit for Quad jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, Marshalling boxes, all yard equipment, AC & DC resources, PTF etc.) and all other material/ equipment/ sub-jobs/ supply of all Paddy Items etc. which are required for final commissioning of bay etc.</p>	1	No.	3

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Sr. No.	SCOPE OF WORK/TECHNICAL SPECIFICATIONS	Job	Unit	Percentage of work to be considered as part of total quoted work as per tender enquiry
9	<p><u>Erection of 66KV Power Transformer controlling HV bay for 20MVA Power Transformer complete in all respects along with all allied equipment-</u> (It includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete erection, Cabling, complete wiring, earthing/ double earthing if applicable & jumpering etc. of equipment & their relevant structures, gantry towers, beams and upper twin conductor busbar)- comprises of 02 No. bus-isolators, 03 No. CTS, 01 No. SF6 Circuit Breaker (including structures), 03 No. Lightning Arrestors, 02 No. Post Insulators, all required marshalling boxes i.e. 01 No. T-100 type, 01 No. C-50 type etc., 01 No. C&R Panel etc., 02 No. CTS-1 towers, 01 No. CBS-01 beam, 01 No. CP Peak, 01 Span twin ACSR 0.4" cond. Busbar, off size nut bolts, spring washers, M5 flat, M5 channel, 02 No. CSI structures, 08 No. CSC structures, 0.4" ACSR Cond. for Quad jumpers, hardware fittings, clamps etc., all type of control cables (for connections between C&R Panel, Marshalling boxes, all yard equipment, AC & DC resources, PTF etc.) and all other material/ equipment/ sub-jobs/ supply of all Ppty Items etc. which are required for final commissioning of bay etc.</p>	1	No.	3
10	<p><u>Erection of 160MVA, 220KV/66KV Power Transformer complete in all respects along with all allied equipment-</u> (It includes all type of work related to arrangement of all type of T&P/ Machinery, unloading of PTF from trailer, wheel fixing, dragging to the final place of erection etc., complete erection (as per manual of PTF), Cabling, complete wiring, earthing/ double earthing if applicable, jumpering, all accessory/structure of PTF and allied 02 No. NCTs (along with 02 No. CSC structures), controlling, operating & RTCC units, dehydration & filling of oil etc., all type of control cables (for connections between C&R Panel, Marshalling boxes/ RTCC/DLTC/ Controls and Cooling cubicle, fans, pumps, indications, protection system, all yard equipment, AC & DC resources, PTF etc.) and all other material/ equipment/ sub-job/ supply of all Ppty Items etc. which are required for final commissioning of PTF etc.)</p>	1	No.	6


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SCOPE OF WORK/TECHNICAL SPECIFICATIONS

Sr. No.	Job	Unit	Percentage of work to be considered as part of total quoted work as per tender enquiry
	<p><u>Erection of 20MVA, 66KV/11KV Power Transformer, 220V 300Ah DC Battery bank, charger & DCDB, all required material in control room, Laying of all 11KV Single core, 300 sq.mm. power cables & Filling of 11KV cable boxes, 11KV busbar structures & 11KV Twin Conductor Busbar and 200KVA, 11KV/0.415KV Station Transformer</u></p> <p>(It includes all type of work related to arrangement of all type of T&P/ Machinery, unloading of PTF from trailer, wheel fixing, dragging to the final place of erection etc., complete erection (as per manual of PTF), Cabling, complete wiring, earthing, Jumpering, all accessory/structure of PTF and allied 02 No. NCTs (along with 02 No. CSC structures), controlling, operating & RTCC units, dehydration & filling of oil etc., all type of control cables (for connections between C&R Panel, Marshalling boxes/ RTCC/OLTC/ Controls and Cooling cubicle, fans, pumps, indications, protection system, all yard equipment, AC & DC resources, PTF etc.) and all other material/ equipment/ sub-job/ supply of all PTFy Items etc. which are required for final commissioning of PTF etc.) - Total Qty. -01 No. PTF,</p> <p>Also includes all type of work related to Loading of battery from PSTCL store, transportation to site of work, and unloading at site, opening of cases, checking & inspection of material, repacking and stacking at site (complete battery, charger, DCDB and allied equipment/ material), shifting of battery to battery room, dust cleaning of all cells, erection of wooden stand/ frame, painting anti-acidic paint (if required to PSTCL), erection of cells on insulators, jumpering cell to cell, row to row & tier to tier, Erection & earthing of DCDB, charger etc. Cabling and connections, earthing (including thimble punching, copper strip fixing etc.), checking and testing, First charging of battery, first discharging of battery, resting and second charging of battery, second discharging of battery, Third cycle of charging battery (all charging and discharging as per SOP manual of battery) etc. and all other material/ equipment/ sub-job/ supply and erection of all PTFy Items etc. which are required for final commissioning of battery bank etc. — Total Qty. - 02 Set of battery, charger, DCDB, Cables etc.</p> <p>Also includes all type of work related to total material's loading at PSTCL store end, transportation to site & unloading at site, Complete placement, erection, Cabling, complete wiring, earthing etc. of equipment & their relevant structures- comprises of 05 No. 11KV VCB, All type of required 220KV & 66KV C&R Panel/other panels (which are not covered in above specific scopes), 01 No. LT Panel (connecting busbars etc., checking and wiring of all meters on it, earthing & testing, laying of LT cable from Station T/F to LT panel including termination etc.) all fire protection/ extinguisher equipment etc. and all other material/ equipment/ sub-job/ supply and erection of all PTFy Items etc. which are required for final commissioning/ completion of work of control room etc. — Total Qty. - 01 Lot</p> <p>Also includes all type of work related to loading material from PSTCL store, transportation and unloading at site, Laying of 11KV Power cable by route of cable trench/digging the trench (if required), arranging and spreading of sand, placing of bricks (if applicable), making all cable joints, mounting/ installing all cable boxes (as required) etc., all arrangement of required T&P/ Machinery for filling of cable boxes, doing the job of filling cable boxes as per manual of cable boxes for specific and complete terminations and all other material/ equipment/ sub-job/ supply and erection of all PTFy Items etc. which are required for final commissioning etc. — Total Qty.- Power cable (length as per site requirement), 12 No. Indoor type & 12 No. Outdoor type cable boxes.</p> <p>Also includes all type of work related to material loading from PSTCL store, transportation and unloading at site, all arranging of required T&P/ Machinery for fabrication of structures through MS material or any other given material (i.e. 04No. CSC structures), all welding, drilling of holes, assembling, fixing & connecting the complete structure for erection/ stringing of 11KV busbars and hanging the power cables, structure painting earthing etc., Cutting the conductor from the drum for required length, fitting of string insulators & other fittings (including all required spacers, clamps etc.), stringing and sagging of busbars (along with all arrangement for stringing of busbar) and all other material/ equipment/ sub-job/ supply and erection of all PTFy Items etc. which are required for final commissioning etc. — total 01 No. complete structure & 01 No. complete 11KV twin Condt. busbar.</p> <p>Also includes all type of work related to material loading from PSTCL store, transportation and unloading at site including GO switch etc., erection, earthing, termination through jumpers etc. from GO switch to Station T/F etc. and all other material/ equipment/ sub-job/ supply and erection of all PTFy Items etc. which are required for final commissioning etc. — total 01 No. Station TF)</p>	1	10

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SCOPE OF WORK/TECHNICAL SPECIFICATIONS

Sr. No.	Job	Unit	Percentage of work to be considered as part of total quoted work as per tender enquiry
12	<p>Erection/ stringing of 220KV Double Busbar (Twin cond.) complete in all respects along with towers, beams, lighting mast, flood lights, Bus PTs, Bus LAS and all allied equipment/ material- (It includes a. 220KV Busbar Section/ span stringing (Twin cond.)- loading all required material from PSTCL store, transportation and unloading at site, Cutting the conductor from the drum for required length, fitting of string insulators & other fittings (including all required spacers, clamps etc.), stringing and sagging of busbars (along with all arrangement for stringing of busbar) and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning as per drawing/ actual site requirement etc. -- total 06 No.spans. b. 220KV Towers- includes loading all required material from PSTCL store, transportation and unloading at site, inspection and checking the members & re-stacking, levelling of base etc., shifting of material to actual place of erection, earthing of tower at base with double bend of MS flat and at top with screen wire, checking, tightening/ retighting of nuts and bolts (including complete erection of peak where-ever required) and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning etc. for the following towers- 04 No. ATS-01, 04 No. ATS-02, 08 No. ATS-03. c. 220KV Beams- includes loading all required material from PSTCL store, transportation and unloading at site, inspection and checking the members & re-stacking, shifting of material to actual place of erection, checking, tightening/ retighting of nuts & bolts and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning etc. for following type of beams- total 15 No. 220KV Beam ABS-01 type d. Lighting Mast- includes loading all required material from PSTCL store, transportation and unloading at site, inspection and checking the members & re-stacking, levelling of base etc., shifting of material to actual place of erection, earthing of tower at base with double bend of MS flat and at top with screen wire, checking, tightening/ retighting of nuts & bolts and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning etc. for following Lightning Mast— 18 Mtr. type Lightning Mast - 01 No.) e. 220KV Bus PTs, LAS & Plis etc.- including all other 220KV yard material which is not covered in above scope of work and also includes Loading all material from PSTCL store, transportation to site of work and unloading at site along with structures for 02 set Bus 220KV PT, 02 set Bus 220KV LA and 09 No. Post insulators at avrious locations in yard area, including 06 No. ABSC & 15 No. ABSL structures, Flood/ street/ yard lights, Fire fighting equipment etc. and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning of all 220KV yard etc.)</p>	1	21


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Sr. No.	SCOPE OF WORK/TECHNICAL SPECIFICATIONS	Job	Unit	Percentage of work to be considered as part of total quoted work as per tender enquiry
13	<p>Erection/stringing of 66KV Double Busbar complete in all respects along with towers, beams, flood lights, Bus PTs, Bus LAs and all allied equipment/material- (It includes-</p> <p>A. 66KV Busbar Section/ span stringing- loading all required material from PSTCL store, transportation and unloading at site, Cutting the conductor from the drum for required length, firing of string insulators & other fittings (including all required spacers, clamps etc.), stringing and sagging of busbars (along with all arrangement for stringing of busbar) and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning as per drawing/ actual site requirement etc.— total 06 spans of Quadruple 0.4" ACSR Conductor.</p> <p>B. 66KV Towers- includes loading all required material from PSTCL store, transportation and unloading at site, inspection and checking the members & re-stacking, levelling of base etc., shifting of material to actual place of erection, earthing of tower at base with double bend of MS flat and at top with screen wire, checking, tightening/ reighting of nuts and bolts (including complete erection of peak where-ever required) and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning etc. for following type of towers — 07 No. CTS-01, 05 No. CTS-02 & 07 No. CTS-03.</p> <p>C. 66KV Beams- includes loading all required material from PSTCL store, transportation and unloading at site, inspection and checking the members & re-stacking, shifting of material to actual place of erection, checking, tightening/ reighting of nuts & bolts and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning etc. for following type of beams- — 18 No. 66KV Beam CBS-01 type</p> <p>D. 66KV Bus PTs, LAs & PIs- including all other 66KV yard material which is not covered in above scope of work and also includes Loading all material from PSTCL store, transportation to site of work and unloading at site along with structures for 02 set Bus 66KV PT, 02 set Bus 66KV LA, 09No. Post Insulators in yard area including 21 no. CSC structures, Flood/ street/ yard lights, Fire fighting equipment etc. and all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning of all 66KV yard etc.)</p>	1	Lot	17
14	<p>Providing Earthing pits/ bores, laying of MS rod & making their connections with equipment/ earthing points- (It includes -</p> <p>1. Bores/ Earthing pits as required in the 220KV side yard/ 160MVA PTFs etc. and includes Loading all material (MS round) from PSTCL store, transportation to site of work, and unloading at site, Providing earthing pits (bores) up to water level (min. 90 feet), laying MS round (32mm) in pits up to water level & providing connection making points outside at top of pits, complete welding/ jointing of rods as required, digging of pits, re-filling of pits after laying MS round etc. all other material/ equipment/ sub-job which is required for final commissioning of all 220KV yard etc. — 11 No. earthing pits/ bores.</p> <p>2. Bores/ Earthing pits as required in the 66KV side yard/ 20MVA PTFs, station TF etc. and includes Loading all material (MS round) from PSTCL store, transportation to site of work, and unloading at site, Providing earthing pits (bores) up to water level (min. 90 feet), laying MS round (32mm) in pits up to water level & providing connection making points outside at top of pits, complete welding/ jointing of rods as required, digging of pits, re-filling of pits after laying MS round etc. all other material/ equipment/ sub-job/ supply and erection of all Patty Items etc. which are required for final commissioning of all 66KV yard etc. — 15 No. earthing pits/ bores.)</p>	1	Lot	3
Total =				100

5.1 MAINTENANCE RESPONSIBILITY DURING THE GUARANTEED AVAILABILITY PERIOD:

During Guaranteed Availability Period, the Contractor shall take continual actions to ensure the guaranteed availability and shall make available all the necessary resources such as specialist personnel, spare parts, tools, test devices etc. for replacement or repair of all


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defective parts and shall have prime responsibility for keeping the system operational. During guarantee period as specified in tender document, contractor shall arrange bi-monthly visit of their representative to site to review the performance of system and in case any defect/shortcoming etc. is observed during the period, the same shall be set right by the contractor within 02 days.

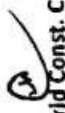
5.2 Assistance by contractor during Protection testing to be done by PSTCL:

It is made clear that before commissioning of equipment and substation, all the protection testing will be done by PSTCL protection teams. The contractor shall ensure to assist the protection testing schedule and the technicians of contractors shall remain present during the while process of testing till commissioning. All the observations raised/ pointed out during protection testing shall be rectified by contractor immediately as a part of contract liability.

5.3 Other necessary instructions:

- i. All the wiring, cabling, connection, termination etc. shall be as per requirement of PSTCL and relevant to PSTCL protection requirement. All the relays, equipment, auxiliary contacts as per requirement of PSTCL, shall be wired by contractor.
- ii. The spacers, hardware fittings, clamps, discs etc. shall be erected as per standards and as per requirement of PSTCL in each busbar, jumpers etc.
- iii. The word 'jumpers'/'jumping' indicates the double/twin quadruple 0.4" Zebra ACSR conductor in all yard of 220KV and quadruple in 66KV yard area as per requirement of PSTCL.
- iv. The isolators, L&E switches and all other equipment shall be capable for SAS integration and shall require to be wired/ connections in complete way that SAS integration may be done in easiest way.
- v. The wiring of isolators, L&E switches and all other equipment shall be done accordingly to meet the requirement of local and remote operation for motorized manual and automatic control/ energization.
- vi. The phase marking and all other paint work shall be in scope of contractor in quoted prices only.
- vii. All the nut-bolts, ferules, lugs etc. shall be used and commissioned as per requirement of PSTCL.
- viii. PSTCL shall have all rights to decide the final wiring, inclusion/ exclusion of any protection system, indication system, control system etc. as required to PSTCL. Contractor shall be bound to complete the wiring, cabling and connection making accordingly.
- ix. 'Earthing' means the complete earthing through double bend earthing procedure of MS Flat of suitable size provided by PSTCL (preferably 50*06mm) and through other copper flats, MS flats and aluminum flats etc. as per requirement of PSTCL.
- x. All the wiring should be done through marshalling boxes only. No direct wiring of equipment with panel be done unless directed by PSTCL.
- xi. All the cables (power cable and control cables) shall be laid properly in trenches only on railings/ channels provided in trenches and it should be dressed in neat and clean position so that the same may be traced and kept controlled for any fault detection in future.
- xii. All the nut bolts used for erection/ installation shall be completely tightened and re-tightened through spring washers at the time of final commissioning and handing over.


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- xiii. The decision of PSTCL regarding final wiring and connections of required equipment/ panel etc. shall be final. Contractor shall have to complete the jobs accordingly.
- xiv. All sundry jobs/ activities such as JCB work etc. or any other kind of job required for erection activities shall be in scope of contractor only.




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