



PUNJAB STATE TRANSMISSION CORPORATION LIMITED

Regd Office: PSEB Head Office, The Mall, Patiala-147001

Corporate Identity No.: U40109PB2010SGCO33814

Office Of: Addl. S.E. / Grid Construction Division, Jalandhar.

E-mail: srxen-gcd-jld@pstcl.org

Notice Inviting Tender (Short Term Open Tender)

E-Tender Enquiry No.11 / 2023-24

Date: 01-03-2024

Office	ASE, Grid Construction Division, PSTCL, Jalandhar.
Tender Enquiry No.	11/2023-24
Issuing Authority	ASE, Grid Construction Division, PSTCL, Jalandhar.
Address	Shakti Sadan, Jalandhar
Place	Jalandhar
Short Description	Erection of Tower Material/Tower Structures, Beams, Busbars for various 220/132 KV Substations under jurisdiction of Grid Construction Division, Jalandhar.
Eligibility Criteria	As per Terms & Conditions
Last Date for Bid Submission	18-03-2024 up to 05.00 PM
Bid Opening Time	19-03-2024 at 11.00 AM
Earnest Money Deposit	Rs. 77,000/-
Payment Mode	Online through e-tendering website- eproc.punjab.gov.in
URL for Additional Information	eproc.punjab.gov.in
Tender Information in detail	A set of tender documents containing technical specifications, General Instructions and Terms & Conditions etc. can be downloaded from the website. Tender can be filed only through e-tendering website eproc.punjab.gov.in

ASE
Grid Construction Division
PSTCL, Jalandhar.

DNIT

Subject: Erection of Tower Material/Tower Structures, Beams, Busbars for various 220/132 KV Substations under jurisdiction of Grid Construction Division, Jalandhar.

Tenders are invited for erection of Tower Material/Tower Structure, Beam and Bus Bar at various 220/132KV Sub Stations of PSTCL under the jurisdiction of Grid Construction Division, PSTCL, Jalandhar.

The scope of work shall include the erection and double earthing of all structure erected with the mesh and erection of screening wire, shield wires and fixation of peaks wherever required. One complete bus section means stringing a set of 3 phases of conductors Single, Twin or Quadra along with relating jumpers. The material shall be provided by PSTCL at work camp site and the work shall be carried out by the contractor. Wherever dismantlement work is involved, costing of same will be fifty percent cost of the similar work/item involved during erection work carried out by contractor. Contractor will be responsible for the safe dismantlement of item to be reused on same or different location.

Wherever single conductor busbar is to be converted into twin/quad conductor busbar, dismantlement of single conductor busbar will be allowed and erection of respective busbar will be allowed.

Wherever twin conductor busbar is to be converted to quad conductor busbar, no dismantlement will be allowed and only erection of additional twin conductor busbar will be allowed. However, in case the existing twin conductor busbar, which is to be augmented, is in dilapidated condition, it can only be replaced by preparing MOM between concerned Sr.XEN/ Grid Const., Sr.XEN/ P&M and concerned Sr.XEN/ Protection, subject to satisfying other conditions of the work order.

For every other dismantlement, MOM between concerned AEE/Grid Const. and AEE/P&M will be prepared, specifying the exact quantity of each item of total material dismantled.

In view of above, the following major provisions for entering the Open Tender/E-Tender are proposed:

The scope of work shall include erection of Tower Material / Structure, Beam and Bus Bar at various 220/132KV Sub Stations at various substation of PSTCL.

Eligibility Criteria:

Either the contractor should be empanelled for carrying out works of grid const. wing as Class A contractor (for year 2023-24) in PSTCL by the competent authority before opening date of tender.

OR

Pre-qualification conditions for outsourcing of labour component for carrying out works would be as following:

1. Contractor/Firm shall submit documentary proof for having respective Class Contractor (Electrical Certificate) issued by competent authority under Indian Electricity Rule 1956 Clause-45, for carrying out such type of jobs.
2. Contractor/Firm will supply the copy of EPF Registration, Labour License/ exemption certificate from labour department wherever required.
3. Contractor/Firm must have PAN No. and GST No. (Attested copy must be submitted for both).
4. Contractor/Firm should have Technical Experience & financial soundness, in which T&P detail, list of Manpower, solvency certificate from the bank (Minimum 10 Lacs), Income Tax return last 3 years be attached.
5. Contractor/Firm shall supply the Experience certificate to the successful execution of works related to electrical Installation any of 66KV and above capacity.
6. This registration does not mean in any way that the contractor/firm is automatically qualified for issue of tender documents for issue of tender document other condition job of NIT has to be final.
7. The contractor will also comply with the provisions of service tax act (Undertaking to be given).
8. Contractor/Firm who are blacklisted or with whom business dealing are suspended by PSTCL/PSPCL & other organisations can-not participate in this tender. If same is not disclosed at time of registration, then the registration will be cancelled without any notice.
9. Contractor/Firm will provide annual financial turnover certificate for last four years.

Completion Schedule:

(i). The Contractor/firm will be given sufficient time for arranging/mobilization of manpower & shifting of T&P at site maximum 7 days after receipt of intimation from concerned grid const. division/Sub-division office via email/WhatsApp to contractor regarding readiness of civil foundation and availability of material at site.

(ii). Contractor shall have maximum allowed period of 560 days for Completion of all work.

Penalty:

(i). If the contractor fails to complete the work within the stipulated period of the Contract Penalty for delay beyond the Completion Period/Extension Period on the part of Contractor/firm shall be 10% for delay up to 30 days and if there is further delay then this office reserves the right to cancel the work order of such contractor/firm.

(ii). If there is further delay of beyond 45 days, then this office reserves the right to cancel the work order of each firm/contractor.

Payment Terms:

100% payment will be made within 45 days after successful completion of the job after certification by the concerned AEE/Grid Construction and ASE/Grid Construction as per prevailing regulations of PSTCL. The contractor will be entitled for the payment in running bills subject to condition that the bill will be raised for complete work at each site/substation and concerned PSTCL officer will certify the same on bills.

Security Deposit:

The Earnest money deposited at the time of tendering by successful tenderer shall be converted into Security Deposit. The remaining Security Deposit will be deducted from the

running bills of the contractor as per prevailing regulations of PSTCL. No interest shall be payable to the contractors on the amount of security deposit.

Quantity:

Quantity of work involved in scope of work can be increased/decreased by the officer inviting tenders as per actual site conditions at the time of execution of work.

Transportation of material:

PSTCL will transport the material at site as per completeness of civil works at site and as per availability of materials in store. However, it will be the responsibility of the contractor for tallying the completeness of material that is being lifted from stores and being transported at site.

The tenders must be submitted online through e-tendering portal of Punjab Govt. i.e. eproc.punjab.gov.in at the date and time stipulated in the NIT.

All term and condition in Works Regulation of PSTCL (along with amendments from time to time), not specified in DNIT/General terms & conditions, shall be applicable which can be downloaded from www.pstcl.org.



ASE / Grid Const. Division
PSTCL, Jalandhar

GENERAL TERMS AND CONDITIONS
TENDERING & CONTRACT AGREEMENT

SUBMISSION OF TENDERS:

1. 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.

i) The tender must be complete in all respects. The following points should carefully be studied in order to ensure uploading/submission of a complete and comprehensive tender. Failure to comply with any of these instructions or to offer brief 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 competitively lowest offer.

ii) Telegraphic quotations will not be accepted.

iii) The tenders shall be uploaded/submitted in three parts i.e. Part-I, Part-II & Part-III. The following procedure will be adopted for the opening of tenders.

a) **Part-I-Earnest Money:** The first part will, consist of earnest money to be deposited as per terms & conditions of NIT through online mode only to eProcurement Website/Agency.

b) **Part-II-Technical/Commercial bids:** The second part will consist of technical specification schedule of deliveries & all other terms and conditions except the rates. All commercial terms i.e. GST etc. are to be specified in the Part-II i.e. technical and commercial part of the bid. Price bid components of their bid should only contain prices so that there is no controversy regarding interpretation of any condition/stipulation at the time of preparation of merit statement after opening the price bid.

c) **Part-III- Price Bids:** The third part will consist of the rates quoted as well as other related terms like freight, insurance, GST etc. and other incidental charges relevant to the price.

If the EMD/PEMD is found to be as per the requirement of the specifications, only then the tender i.e. Part-II shall be opened. The bids without earnest money shall be outrightly rejected.

After opening that Part-II of the bids (technical/commercial), the bids will be technically & commercially evaluated by PSTCL and (Price bid) shall be opened in case of only those firms whose Part-I and Part-II of the bids after evaluation is found to be conforming to the specifications.

2. The officer inviting tenders, contracting/purchasing agency/PSTCL (here-in-after referred to as Purchaser) reserve the right to modify the schedule of requirement, technical particulars and the specifications at any time and to place the order as a whole or in parts and to reject any or all the tenders received without assigning reasons. He will not be responsible for and will not pay for expenses or losses that may be incurred by the tenderer in the preparation of the tenders. Quantity of work involved in scope of work can be increased/decreased by the officer inviting tenders as per actual site conditions at the time of execution of work.

3. Quotations/Tenders shall be uploaded on given web site up to specified hours of the due date given in the tender notice and shall be opened immediately thereafter in the presence of tenderers or their agents who may like to be present.

4. In case the due date of opening tenders happens to be a holiday, tenders shall be opened at the same time 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 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, failing which tenders may not be considered.

1.4 EARNEST MONEY:

- i) EMD shall be NIL for tenders valuing less than Rs.50,000/- and 2% of the tender value rounded off to a multiple of Rs.10 on the higher side for tenders valuing more than Rs.50,000 and a maximum of Rs.5 Lakh.
- ii) In case of tenders not accepted, the Earnest Money shall be refunded within 30 days of the award of order/contract to the unsuccessful tenderer or after expiry of additional period whichever is later.
- iii) Tenders without Earnest Money shall not be entertained/opened.
- iv) The earnest money of successful bidder will be converted/adjusted as security and remaining amount of security will be deducted from the running bills of the contractor.
- v) EMD to be deposited by Firm is 2% of tender value i.e. Minimum Rs. 77,000.
- vi) EMD is Exempted to the firms to whom exemption is applicable as per rules and regulations of PSTCL only.

1.5 COMPLETION SCHEDULE

- i) The Contractor/firm will be given sufficient time for arranging/mobilization of manpower & shifting of T&P at site maximum 7 days after intimation Receipt From concerned grid const. division/Sub-division office via email/WhatsApp to contractor regarding readiness of civil foundation and availability of material at site.
- ii) Contractor will be allowed maximum period of 560 days for completion of all Works.

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 initialled 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.

1.8 VALIDITY OF TENDERS:

The tenders as submitted should be valid for acceptance for at least 120 days from the date of opening of tenders, unless specified otherwise.

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 & SIGNING OF CONTRACT

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 **03AAF4714J1ZK**.

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 based on 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 Punjab State Transmission Ltd. 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 rule 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 Punjab State Transmission Corporation Ltd. 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.

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/Certificates shall be furnished by them or not.

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.

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 or 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.

1.12 TERMS OF PAYMENT

i) 100% payment within 45 days after successful completion of the job after certification by the concerned AEE/Grid Const. and ASE/Grid Construction.

ii) Contractor will be entitled for the payment in running bills subject to condition that the bill will be raised for complete work at each site/substation and concerned PSTCL officer will certify the same on bills.

1.13 PENALTY

(i) If the contractor fails to complete the work within the stipulated period of the Contract Penalty for delay beyond the Completion Period/Extension Period on the part of Contractor/firm shall be 10% for delay up to 30 days and if there is further delay then this office reserves the right to cancel the work order of such contractor/firm.

(ii) if there is further delay of beyond 45 days then this office reserves the right to cancel the work order of each firm/ contractor

1.14 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 30 days from the date of the occurrence.

1.15 RATES

The rates allowed shall be strictly as per schedule of Estimated Price attached at BOQ/price Bid Performa. Contractor shall fill the rates, GST @ rate and total price in the Performa BOQ/Price Bid Performa.

1.16 D.D.O.

Payment shall be made by AO, Grid Const. Circle, PSTCL, Ludhiana. The copies of bill shall be sent directly to the respective Division/Sub-division office

1.17 For all other terms & conditions not specifically mentioned here in NIT, the work/Financial/Purchase regulations (Amended from time to time) shall prevail to be considered.

1.18 CANCELLATION

PSTCL reserves the right to cancel/amend or alter this order without assigning any reason what so ever at any time before the receipt of material.

1.19 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.

1.20 Tenderers will have to comply with all the rules and regulations under Factories Act, Labour Laws, Industrial Dispute Act, EPF Act, Bonus Act and Retrenchment Compensation Act, etc.

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 of the respective Grid Const. Divisions under whose jurisdiction work is being carried out are situated.

1.22 REVERSE AUCTION (RA)

- In case the no. of bidders are more than 3, the H1 (Highest) bidder shall not be eligible to participate in further process of the tender and his tender shall be rejected.

- All the Bidders shall be assigned a unique user name and password by e-tendering agency of PSTCL. Bidders are advised to change the password after the receipt of initial password from PSTCL to ensure confidentiality. All bids made from Login IDs assigned to bidders shall be deemed to have been made by bidders/bidders' company/ bidders' authorized representatives.

- Bidders shall be required to submit their acceptance to the stipulated terms and conditions before participating in the R.A.

- Online Reverse Auction shall be conducted by PSTCL on pre-specified date and time for duration of 1 Hour. The bidders may quote the bids from their own offices /place of their choice. Internet connectivity is to be ensured by bidders themselves.

- All bidders are required to submit their price bid along with submission of Techno-commercial bid as per schedule. Only those bidders who submit their original bids within the scheduled time and who are considered technically and commercially eligible shall be eligible to participate in RA process.

- The 'Opening Price' i.e. start price for RA shall be decided by PSTCL. Bid Decrement shall be 0.1% of L-1 Bid Price obtained against a particular tender enquiry upon the opening of Price Bid of tender

- The maximum limit for reducing prices during reverse auction process shall be 40% of received L-1 FOR destination rate in original price bid.

- Bidders shall be able to view the following on their screen along with the necessary fields during Online Reverse Auction:

- a) Start Price

- b) Decrement Value

- c) Current Bid value of the Bidder (Total Bid Price)

- d) Best bid in the Auction (Current L1 price)

- e) Next Valid Bid (Total Bid Prices to be quoted in order to become L1)

- f) Minimum Bid Price (Bidder to enter his minimum Bid Price here)

- Bidder may become 'L1 Bidder' by offering a price equal to or lower than the Next Valid Bid (i.e. current L-1 price minus decrement) and this shall continue as an iterative process.
- **Auction Extension Time:** If a valid bid is placed within 5 minutes of End Time of the RA, then Reverse Auction duration shall get automatically extended for another 5 minutes from the existing end 19 time. It may be noted that the auto extension will take place if a valid Bid comes in those last five minutes. If a bid does not get accepted as the lowest Bid, the auto-extension will not take place even if the bid might have come in last five minutes. The above process shall continue till no valid bid is received in last 5 minutes which shall mark the completion of reverse auction. The bidders are advised not to wait till the last moment to enter their bid so as to avoid complications related to internet connectivity, network problems, system crash down, Power failure etc. No request for extension in time period of RA due to any of the above reasons shall be entertained by PSTCL.
- If no bid is received within the specified time duration of the online RA, then PSTCL shall reserve the rights to scrap the online RA process and proceed with the L-1 Bid Price received through e-tendering for further processing.
- After completion of online Reverse Auction, the Closing Price (CP) shall be considered as L1 rate for further processing including negotiations (if required). Based on the final price quoted by bidders, the successful bidders shall be required to submit summary of Final Price in prescribed format (Summary of Final Price-Reverse auction, Uploaded by PSTCL in Excel Sheet) within 2 working days of conclusion of the RA. In case a bidder fails to submit the above Summary, then it may lead to cancellation of bid and call for action against the bidder which may include forfeiture of EMD/PEMD and suspension of business dealings etc. The final break up of prices will be given in a manner that all quoted prices shall be reduced proportionately by the same percentage and not arbitrarily.

1.23 SECURITY DEPOSIT

The Earnest money deposited at the time of successful tenderer shall be converted into Security Deposit. The remaining Security Deposit will be deducted from the running bills of the contractor. No interest shall be payable to the contractors on the amount of security deposit.

1.23(a) LOCATION: The location for execution of jobs shall be within Punjab under Grid Const. Division PSTCL. Jalandhar.

1.24 TRANSPORTATION OF MATERIAL

PSTCL will transport the material at site as per completeness of civil works at site and as per availability of materials in store, however it will be the responsibility of the contractor for tallying the completeness of material that is being lifted from stores and being transported at site.

NOTE: Contractor should have satisfactory executed similar work of erection of Tower structures and bus bar as mentioned in the DNIT. The contractor should have service tax, PAN No, Income Tax No, EPF No. etc.

All term and condition in Works Regulation of PSTCL (along with amendments from time to time), not specified in DNIT/General terms & conditions, shall be applicable which can be downloaded from www.pstcl.org.


 ASE / Grid Const. Division
 PSTCL, Jalandhar

OTHER IMPORTANT CONDITIONS OF TENDER

1. The responsibility and liability of all the material up to its cost shall be of contractor only when material is handed over to contractor by PSTCL. 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 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 permission of the Er. in-charge. 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. In any case of damage, the contractor shall be responsible.

2. The contractor shall submit schedule of shut downs (if any) to Er. in-charge by atleast 03 days in advance. If any delay occurs in approval of shutdowns that period of delay shall be excluded while calculating the total time taken by the contractor for completion of work.

3. FACILITIES TO BE PROVIDED BY THE CONTRACTOR

- i. Power supply for cutters, welding machines, drilling holes, erection of Substation material/equipment etc. and for any other allied auxiliary will be arranged by the bidder from any of the nearby electricity utility office at bidder's 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. 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.
- ii. Water 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.
- iii. The contractor shall provide all the construction equipment, tools, tackles and scaffoldings required for erection and commissioning of the material covered under the contract. The bidder shall himself arrange the Tools & tackles etc which he proposes to bring to site for the purpose of erection, & commissioning. PSTCL shall not pay any charges for T&P, tools and tackles etc.

4. HIGHLIGHTED SCOPE OF WORK

The following works are also included in the scope of tender/ contractor–

- i. **Complete Erection & commissioning of Grid structure Towers-** includes inspection and checking the members at site & 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/ retightening of nuts and bolts (including complete erection of peak where-ever required) for ATS-1, ATS-2, ATS-3 etc. type of 220KV towers, BTS-1, BTS-2, BTS-3 etc. type of 132KV towers & CTS-1, CTS-2, CTS-3 etc. type of 66KV towers.
- ii. **Complete Erection & commissioning of Grid structure Beams** - Includes inspection and checking the members at site & re-stacking, shifting of material to

actual place of erection, checking, tightening/ retightening of nuts and bolts for 220KV ABS-01 type, 132KV BBS-01 type & 66KV CBS-01 type beams.

- iii. **Complete Erection & commissioning of 220KV, 132KV & 66KV busbars** - Includes inspection and checking of material at site & re-stacking, shifting of material to actual place of erection, Cutting the conductor 0.4" (single, Quad or twin as per requirement of PSTCL) from the drum for required length, fitting of string insulators & other fittings (including all required spacers, clamps etc.), stringing and sagging of busbars, modification of gantries (if required), connecting jumpers/jumpering work of busbar with equipment/ existing busbars etc. (where-ever applicable) along with all arrangement for stringing of busbars for all three phases.
- iv. **Complete Erection & commissioning of Grid structure ASI** - Includes inspection and checking the members at site & re-stacking, levelling of base etc. shifting of material to actual place of erection, earthing at base with double bend of MS flat, checking, tightening retightening of nuts and bolts for ASI Structures.

All other minor jobs/ scope for final commissioning of towers, beams, ASI Structures and busbars not specifically mentioned here in, shall be included in scope of contractor. Rates should be quoted considering the all-inclusive. The spacers, hardware fittings, lamps, discs etc. shall be erected as per standards and as per requirement of PSTCL in each busbar, jumpers etc.



ASE / Grid Const. Division
PSTCL, Jalandhar