SPEC. STQ-5033 15 KV NCTs



PUNJAB STATE TRANSMISSION CORPORATION LIMITED,

Regd Office: PSEB Head Office, The Mall, Patiala.147001. Office of: Chief Engineer/TS, 3rd Floor, Shakti Sadan Patiala-147001. Tele-0175-2303676 email: ce-tl@pstclindia.org FAX-0175-2207774.

TENDER SPECIFICATION NO. STQ-5033

FOR DESIGN, MANUFACTURE, TESTING & SUPPLY of 15 KV NCTs.

LAST DATE OF RECEIPT OF TENDERS: 05.06.14 Upto 11.00 AM DATE OF OPENING OF TENDER: 05.06.14 At 11.30 AM COST OF SPECIFICATION: RS. 500/-(RS. FIVE HUNRED ONLY) TELEPHONE NO. DIRECT: 0175-2207774 FAX NO. 0175-2207774 FULL E.M.D Rs. 25.000/-

Dy. CE/ TS (DESIGN), PSTCL, PATIALA.

- NOTE: 1) ONLY FIRM PRICES MAY BE QUOTED. OFFER WITH VARIABLE PRICES WILL BE REJECTED.
 - 2) Cost of specification i.e. Rs. 500/- in the form of Demand draft in favour of AO/CPC, PSTCL, Patiala is to be submitted in a separate envelope along with the tender failing which tender of the firm shall not be accepted.

<u>INDEX</u>

Page No.

1.	SECTION-I	
	General terms and conditions and Instructions to the tenderers.	3 to 17
2.	SECTION-II	
	Technical Specification for 15 KV NCTs	18 to 21
5.	Drawing of top plan of Supporting Structure	22
6.	ANNEXURE-A	
	Schedule of Guaranteed & other Technical Particulars	23 to 24
7.	ANNEXURE- B	
	Schedule of Technical Requirement	25
8.	ANNEXURE – C	
	Performa for work Appraisal/Self Appraisal	26 & 27
9.	ANNEXURE-D	
	Schedule of Deviations	28
10.	ANNEXURE-E	
	Performance Schedule	29
11.	ANNEXURE – F	
	Schedule of Requirement and Prices	30
12.	ANNEXURE – G	
	Undertaking Form for order preference	31

SECTION-I GENERAL TERMS AND CONDITIONS

AND

GENERAL INSTRUCTIONS TO THE TENDERERS

1.0 GENERAL INSTRUCTIONS TO BE OBSERVED BY THE TENDERERS

1.01 GENERAL:

The following instructions must be carefully observed by all the Tenderers. Offer/Tender not strictly in accordance with these instructions will be liable to be rejected:

- i) The tenders must be complete in all respects. The following points should be carefully be studied in order to ensure 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 tender effective comparison of the tender as a whole, impossible and may lead to rejection of an other-wise competitively lowest offer.
- ii) Tender should be submitted in triplicate per registered post, each copy should be separately tagged and clearly marked as 'Original', 'Duplicate', 'Triplicate'.
- iii) Telegraphic quotations will not be accepted.
- iv) Offers/tenders should positively reach before the stipulated time and on the last date prescribed for their receipt. Those received late will not be considered/opened at all regardless of the date of posting of the tender.
- v) Offers/tenders should be enclosed in double covers. Both the inner and the outer covers should be sealed and super scribed with the tender/offer number together with the date on which the offer/tender is due and items of material covered and should also invariably contain the name of the bidding firm.
- vi) The Demand Draft/Cash receipt & other information concerning Earnest Money as per clause 2.02 shall be furnished in separately sealed envelope super scribed Earnest Money with the tender/offer number together with the name of tendering firm & the main tender in other envelope. The firm having permanent security deposit of Rs.10.00 lac (Rs Ten Lacs) with the CHIEF ENGINEER / TS, PSTCL, PATIALA SHALL GIVE COM-PLETE DETAILS OF THE DEPOSIT in the envelope meant for Earnest Money. The main tenders and Earnest Money in separate covers shall be received in the office of Chief Engineer/TS, TS Design, 1st Floor, Shakti Sadan, PSTCL, Patiala-147001 up to 11.00 A.M. on the due date. While opening the tender the envelope containing Earnest Money will be opened first and if the Earnest Money is found to be in accordance with the terms of specification only then the sealed envelope containing the main tender will be opened, any tender /tenders received late shall also not be opened.
- vii) Offers/tenders will be opened on the date and time prescribed in the N.I.T. / Enquiry in the presence of authorized representatives of Tenderers, who actually submitted the tender, If they present themselves at the time of opening of tenders. In case the date of opening of tender falls on a holiday or holiday is subsequently declared on that date, the tenders will be opened on the next working day following the holiday.
- viii) The Purchaser reserves the right to modify the "Schedule of requirements", 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 any reason. He will not be responsible for and will not pay for expenses or losses that may be incurred by Tenderer in the preparation of the tenders.

- ix) The material offered should be strictly according to the specifications laid down in the Enquiry. The quotations should also indicate the make of the manufacturer, brand and company and accompanied with other descriptions, literature and sample, if any, at Tenderer's own cost.
- x) No conditional offers shall be acceptable.
- xi) It has been decided by the PSTCL to accept Permanent Earnest Money of Rs.10.00 lac (Rs Ten Lacs) for Chief Engineer/TS, PSTCL, Patiala.

1.02 PREPARATION OF TENDER:

The tender shall be prepared in formal manner neatly typed or printed with all prices stated both in words and figures. There shall be no erasing and any corrections made should be neatly done and signed. A systematic form of totaling should be adopted to avoid any ambiguity with detailed description of the equipment offered.

1.03 SUBMISSION OF TENDERS:

a) The tender should be submitted strictly as per NIT/ Tender specification complete in all respects. Alternate suggestions conforming to some British, American or other internationally recognized standards or practice, if any, must be clearly detailed out, explained and justified. These variations should be detailed out clause-wise in the same chronological order as given in this specification. No post tender development will be allowed regarding any change in terms of prices or technical specification.

THREE PART BIDS

Tender shall be submitted in three parts i.e. Part-I, Part-II and Part-III. Each part will be enclosed in a separate envelope during super scribed on the envelope as under. All the three envelopes will be further enclosed in a larger envelope. The following procedure will be adopted for the opening of the tenders:-

Part-I Earnest Money:

The first part will consist of earnest money deposit in the form of demand draft in favour of AO/CPC, PSTCL, Patiala. In case of permanent EMD, the envelop must containing certificate to this effect as per clause 2.02 ii (b).

Part-II Commercial bids/Technical:

The second part will consist of technical specification, schedule of delivery and all other terms & conditions except the rates. All commercial terms including discount if any, ED, CST, Punjab Sale tax etc. should be specified in part-II of the bid, so that any ambiguities relating to general terms & conditions and technical details can be sorted out before the opening of Part-III i.e. price bid.

Part-III Price Bids:

a) The third part will consist of the rates quoted for each item as well as other related terms like freight, insurance, excise duty, CST etc. No correspondence/clarification shall be entertained after the opening of part-III.

Firstly the main envelope containing the bids will be opened in the presence of bidders representatives who choose to be present at the time, date and at the address named above. After opening the main envelopes, the envelope marked part-I (Earnest money) shall be opened first and if earnest money is found to be as per the requirements of the spec. only

then the envelope marked Part-II shall be opened. The bids without earnest money shall be out rightly rejected.

- b) 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. 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.
- c) If some new firm submits tender which has never supplied the tendered item to PSTCL. earlier, its works appraisal shall be carried out before opening of the Part-III "Price Bid" to ascertain whether the offer of the firm is technically/Commercially acceptable or not.
- Note: The offer of the firms is liable to be rejected in case works appraisal fee is not received along with tender. For the works appraisal, new firm shall have to deposit following charges along with tender itself in shape of DD In the name of AO/CPC, PSTCL, Patiala.

a) Rs. 50,000/- for the firms located outside Punjab.
b) Rs. 25,000/- for the firms located within Punjab.
Note: - The above charges are non-refundable, and works appraisal of the firm does not entitle the firm for placement of order

1.04 VALIDITY:

The tender should be unconditionally valid for at least 120 days from the date of opening and any withdrawal or modification of the offer shall not be permitted after opening of Part-III of tender.

2.00 GENERAL TERMS & CONDITIONS:

2.01 PRICES:

i) The unit rates should be quoted F.O.R. Destination at any Railway Station in Punjab/Punjab State Transmission Corporation Ltd. Railway siding, where-ever existing or delivery at PSTCL's stores, through road transportation which will be treated at par with F.O.R. Destination. The break up of the **F.O.R.** destination price should be given as under:-

The price of the material inclusive of packing and forwarding, part of production cost.

a) Packing cost not forming part of production cost, handling, cartage etc. freight charges and transit risk insurance covered in F.O.R. destination price.

b) All taxes and duties livable on the price of finished goods as per sub-clause (i) (a) shall be paid extra and the same should be shown separately as prevalent on the date of opening of tender, to be paid at the rate as may be actually prevalent at the time of supply, otherwise these elements shall be deemed to be included in the quoted prices and will not be paid extra. No taxes & duties will be payable on the element of cost quoted under sub-clause (i) (b).

c) In case of rates ex-works/ex-godown and for imported material, freight charges, transit risk insurance, handling and clearance charges, F.O.B. and C.I.F., commission of clearing agents at Ports, should also be indicated separately.

d) Only FIRM prices may be quoted. Variable Prices will not be accepted.

e) The rates quoted F.O.R. destination or ex-works should be given in both figures and words, and any overwriting, erasion, cutting etc. should be legibly signed or avoided. Offers/ tenders written in pencil shall be ignored.

f) The prices tendered shall be such as to cover all the material destroyed under tests and no extra payment will be made for the material so destroyed.

- Note:-
- a) If the any firms intend to supply the material/equipment from different works, then the unit FOR rates should be the same for all the works so that there is only one merit position irrespective of location of works. The offer of the firm with different FOR rates for different works shall be rejected.
- b) There should be only one option relating to technical/commercial specification, so that FOR Destination rate is one. Any offer with multiple options shall be rejected.

2.02 EARNEST MONEY:

i) The Tenderers shall be required to submit Earnest Money at the following rates in the form of Punjab State Transmission Corporation Ltd. Cash Receipt/Bank Draft in favour AO/CPC, PSTCL payable at Patiala exclusively for CE/TS, along with the tender: Rs 25,000 /-

FULL E.M.D

- a) Tender valuing up to Rs.50,000/-
- b) Tender valuing above Rs.50,000/-

Nil

- @ 2% of tendered value rounded off to multiple of Rs.10/- on the higher side subject to minimum of Rs.5000/-and maximum of Rs.10.00 lac. In case of three part bids, a fixed amount of earnest money worked out @ 2 % may be got deposited from the prospective bidders depending upon the estimation done by the organizations of the PSTCL.
- ii) The following shall be exempted from depositing Earnest Money:-
- a) Suppliers having permanent Earnest Money of deposit Rs.10.00 Lac with the CE/TS PSTCL. in respect of Chief Engineer/TS: - A certificate to this effect issued by the concerned Accounts Officer of the during three months immediately preceding the due date of tender opening and showing the Serial Number/Account Number allotted in the Permanent Earnest Money Deposit Register shall be submitted by the Tenderers in the envelope for Earnest Money.
- b) Sole Manufacturers/Suppliers of Proprietary items.
- iii) Earnest money may be accepted in the form of Bank Guarantee valid up to four months after the validity date of tenders as per NIT/Tender specification in the case of Public Sector Undertakings partly owned by Punjab Government/Central Govt. /other State Governments.
- iv) a) In case of tenders not accompanied by full amount of Earnest Money for the items tendered but not less than 25% of the entire amount due, the order/contract shall be awarded only for part of material/equipment services limited to a value corresponding to the actual amount of Earnest Money submitted with the tenders provided the placing of such part order is otherwise feasible and is in the interest of the PSTCL, otherwise such tenders shall be ignored.
- b) The amount due as referred in (iv) a shall be calculated @ 2% of the tender value and shall not be taken as Rs. 10 lac i.e. Maximum amount payable as EMD. Therefore, 25% of the earnest money shall thus be worked out on the basis of entire amount so calculated, which shall of course be subject to maximum of Rs. 10.00 lac and minimum of Rs. 5,000/-.

- v) 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 Tenders.
- vi) In case of successful tenderers, Earnest Money shall be converted as security deposit and short fall if any shall be got deposited for faithful execution of purchase order/contract.
- vii) In case of tenders not accepted, the earnest money shall be refunded within 30 days of the award of order/contract to successful tenderers.

2.03 SALES TAX:

a) Value Added Tax

The VAT as applicable if inclusive in prices shall be paid against documentary proof on submission of following certificates:-

i) Certified that the transaction on which tax has been claimed has been/will be included in the return submitted/to be submitted to the Sales tax authorities for the assessment of the tax and the amount claimed from the PSTCL has been/shall be paid for the Sales Tax Authorities.

ii) Certified that the goods on which tax has been charged have not been exempted under the rules made there-under and charges on account of the Sales tax on these goods are correct under the provisions of the relevant act or rules made there-under.

iii) Certified that we shall indemnify the PSTCL. in case it is found at a later stage, that wrong or incorrect payment had been made on account of tax paid by us.

iv) Certified that we are registered dealer & our Regn. no. is.

b) CENTRAL SALES TAX:

The Punjab State Transmission Corporation Ltd., Patiala (PSTCL) has come into existence w.e.f. 16.04.2010. The process for getting PSTCL registered as a dealer under the Central Sales Tax act has been initiated.

When the Central Sales Tax is to be paid by the PSTCL, a declaration Certificate in form-'C' will be issued by the AO/CPC, PSTCL, Patiala on receipt of material. When the tax is to be paid by the Supplier a declaration certificate in form-'C' will be issued by the AO/CPC, PSTCL, Patiala, subject to submission of the following certificates:-

i) Certified that the transaction on which tax has been claimed has been/will be included in the return submitted/to be submitted to the Sales Tax Authorities for the assessment of the Sales Tax and the amount claimed from the PSTCL has been/shall be paid to the Sales Tax Authorities.

ii) Certified that the goods, on which Sales Tax has been charged have not been exempted under Central Sales Tax Act or the Rules made there-under and the charges on account of the Sales Tax on these goods are correct under the provisions of the relevant Act or rules made there under.

iii) Certified that we shall indemnify the PSTCL in case it is found at a later stage, that wrong or incorrect payment had been made on account of the Sales Tax paid by us.

iv) Certified that we are registered dealer under the Central/State Sales Tax act and our Registration No. is_____

v) Certified that payment has been made under protest. The bills for the Sales Tax and insurance charges, if any, should be submitted separately. A declaration certificate in form 'C' will be issued by AO/CPC, PSTCL, PATIALA for all supplies received during a particular accounting year.

The firms indicating NIL or concessional rate of CST/ST in their tenders will have to absorb the CST/ST up to full rate applicable at the time of tendering. The firms which do not agree to this

stipulation or indicate C.S.T. as extra without indicating applicable rate shall be loaded with maximum rate.

2.04 EXCISE DUTY:

If applicable will be paid at full rates prevailing during the scheduled delivery period subject to the production of the following certificates by the Manager/Senior Administrative Officer of the firm:

- i) Certified that the transaction on which the Central Excise Duty has been claimed has been/shall be included in the return submitted/to be submitted to the Central Excise Authorities and amount claimed from the PSTCL has been/shall be paid to the Central Excise Authorities.
- ii) Certified that the goods on which Excise Duty has been charged have not been exempted under Central Excise Duty rules and that the Central Excise charged on these goods is not more than what is payable under the provision of relevant Act or rules made there under.
- iii) Certified that we shall indemnify the PSTCL in case it is found at a later stage that wrong or incorrect payment has been received on account of Excise Duty. The benefit/credit of the CED under MODVAT Scheme duly authenticated by the authorities/representatives of the Central Excise Deptt. shall be allowed to the Purchaser in the invoice of concerned equipment. In case Central Excise staff refuses to issue a separate gate pass indicating the excise duty claimed from you, the original invoices raised for the supply of the equipment will bear a certificate from the Central Excise staff to the fact that Excise Duty has been charged from you and the amount so charged will be indicated.
- **Note:** The firm indicating NIL or concessional rate of E.D in their tender will have to absorb E.D. up to the final rate applicable at the time of tendering. The firms which do not agree to this stipulation or indicate E.D. as extra without indicating the applicable rate be loaded with maximum rate of excise duty.

2.05 OCTROI CHARGES:

Octroi charges shall be paid extra on actual basis as applicable.

2.06 INSURANCE:

i) The rates are required to be quoted on F.O.R. destination basis and it is the responsibility of the Supplier to deliver the goods in sound condition F.O.R. destination and for that purpose the Supplier may at his option insure the material against all risks at his own cost during transit for full delivered value of the material up to destination. All works in connection with making and settling of claims, if any, with Railway Authorities and/or Insurance Company shall be carried out by the Contractor for which no extra payment shall be made by the PSTCL.. However, necessary assistance required in connection with making and settling of such claims, if any, shall be provided by the consignees.

ii) All damages and/or shortages during transit as covered by the Insurance shall be made good immediately on receipt of such information from the consignees without waiting for settlement of claims. However, in case of apparent damages/shortages the con- signees shall obtain the loss/damage certificate from the Railway Authorities and send the same to the Contractor within a period of thirty days from the date of receipt of material. A certificate shall be submitted by the Suppliers/Contractors with each bill to the effect that the material has been duly insured.

iii) The consignees shall report losses and damages to the firm within 30 days of the arrival of the equipment at the site. It will, however, be Supplier's responsibility to prefer timely claims on the insurance under-writers and to arrange replacement thereof to the consignees.

iv) The Suppliers shall be wholly responsible for the loss, shortages, damages etc. during transit. Such shortages and damages etc. will have to be replaced/repaired by the Supplier/Contractor free of cost immediately without waiting for maturing of the Supplier's/Contractor's claims with the Road transport/Railway Authorities.

v) In case replacement/repair of defective material is not carried out within six months of intimation of damages, Supplier shall have to pay interest at the rate of 12% per annum on the advance payments made by the Punjab State Transmission Corporation Ltd. from the date of the payment up to the date of its re-commissioning of the equipment after replacement/repair or to the date the default is made good.

2.07 DELIVERY SCHEDULE:

The offer should clearly indicate monthly/quarterly schedule of deliveries, date of commencement and completion of supply against that indicated in the Notice Inviting Tender/ Specification which should normally cover period for entire job of manufacture, testing, inspection and supply after acceptance and shall be reckoned from the date of dispatch in case of rail transport and Receipted Challan/Goods Receipt in case of road transportation by Goods Carriers. The Purchase Orders shall be placed strictly on the above understanding. Ex-stock and quicker deliveries may be sometimes preferred.

2.08 CONTRACT:

The detailed order issued in accordance with agreed terms and conditions and accepted/acknowledged by the firm shall itself form valid contract along with subsequent amendment, if any, and shall be construed and operated as such in terms of Indian Contract Act-1872 as amended up to date.

It will be obligatory on the part of the successful Tenderer to execute within 30 days of the receipt of detailed order, a legal contract agreement on non-judicial stamp paper of the appropriate value. The detailed Purchase Order so issued shall be termed Purchase Order-Cum-Contract Agreement. The contract shall be made in duplicate and one copy will be retained by each party.

2.09 SECURITY DEPOSIT:

i) The successful Tenderers shall be required to submit security deposit for faithful execution of the Purchase Order/Contract of value exceeding Rs.50, 000/- at the rate of two percent (2%) of order value rounded off to a multiple of Rs.10/- on the higher side.

ii) Ordinarily the Earnest Money received with tenders shall be converted into Security Deposit. If the amount of Earnest Money received with tender is more than the amount of security deposit required for the Purchase Order/Contract, the balance shall be refunded and in case of shortfall the Contractor/Supplier shall be required to deposit the additional amount.

iii) The Tenderers having permanent deposit of Rs. 10.00 lac with CE/SS and hence exempted from depositing Earnest Money with Tenders, shall also be required to submit Security Deposit of 2% of order value in the form of Bank Guarantee within 30 days from the award of Order/Contract.

iv) The following shall be exempted from depositing security against Orders/Contracts given to them:

- a) Manufacturers/Suppliers of Proprietary items.
- v) On faithful execution of Purchase Order/Contract in all respects, including warranty period, if any, the security deposit of the Contractor/Supplier shall be released by the Contracting/Purchasing Agency.
- vi) In the event of default on the part of the Contractor/Supplier in the faithful execution of Purchase Order/Contract his security deposit shall be forfeited by an order of the contracting/purchasing agencies. The forfeiture of Security Deposit shall be without prejudice to any other rights arising or accruing to the PSTCL under relevant provisions of the Purchase Order/Contract, like penalty/damages for delay in delivery including suspension of business dealings with PSTCL for specific period.

2.10 INTIMATION TO THE AO/CPC, PSTCL AND CONSIGNEES:

The Supplier will have to intimate the probable date of dispatch 15 days in advance followed by telegraphic advance intimation regarding the actual date of R.R./LR to AO/CPC, PSTCL, PATIALA to enable him to arrange payment, failing which demurrage, wharf age etc. will be to Supplier's account. A copy of such intimation should be sent to the consignee and Chief Engineer/TS, TS Design, 1st Floor, Shakti Sadan, PSTCL, Patiala-147001 also for reference, immediately.

2.11 INFORMATION REGARDING LIST OF THE BANKERS, THE PURCHASER DEALS WITH:

The Punjab State Transmission Corporation Ltd. deals with the following Banks at Patiala:

i) State Bank of Patiala, The Mall, Patiala

a) The Railway Receipt/Goods Receipt and invoices etc. should be sent to the authorities to be specified in the Purchase Order.

b) Any demurrage occurring as a result of sending Railway Receipts/Goods Receipts through a Bank other than the one with which the accounts of the Purchaser are operated will be to the account of the Supplier/Contractor.

c) No goods will be accepted by the consignees unless accompanied by priced challans or invoices.

2.12 TERMS OF PAYMENT:

100% of the contract value pro-rata for each consignment of operationally complete equipment dispatched after approval of inspecting Authority/Test Certificates etc. along with 100% Sale Tax, Excise Duty and other statutory levies as per contract shall be paid within 30 days against receipted challans subject to furnishing a Bank Guarantee of 5% of the amount valid for a period of three months after receipt of the material/equipment in good condition against that consignment. The payment shall be made through RTGS. For this purpose, following details/documents may be provided to AO/CPC(T), PSTCL, Patiala while entering contract agreement:-

- i) Name and address of the beneficiary
- ii) Name and address of the bank
- iii) Account No. of the beneficiary
- iv) IFSC code
- v) Cancelled cheque

2.13 FORCE MAJEURE:

During the pendency of the Contract/Purchase 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 the 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, acts of Civil/Military authorities or 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. The supplies shall be resumed under the contract as soon as practicable after the happening (event) ceases to exist.

2.14 PENALTY/DAMAGES FOR DELAY IN DELIVERY:

"If the supplier fails to deliver the material/equipment within the stipulated delivery period of the Purchase Order/Contract, the same is liable to be rejected and if accepted, the supplier shall be liable to pay as penalty charges, a sum of 0.5% (half of one percent) of the cost of undelivered supply/incomplete equipment per month of delay or part thereof, not exceeding maximum limit of 5% of the cost of complete unit of undelivered equipment so delayed. There will be a slack of one month that will not entail any penalty and will not involve any additional financial implication. Delay beyond slack period will attract penalty for the period of delay including slack period. However there will be no penalty/liquidated, damages in respect of purchase of proprietary items."

2.15 NEGLIGENCE AND DEFAULT:

In case of negligence on the part of Supplier/Contractor to execute the order/contract with due diligence and expedition and to comply with any reasonable orders given in writing by the Purchaser in connection with the Purchase Order/Contract or any contravention in the provisions of the Purchase Order/Contract, the Purchaser may give 21 days notice in writing to the Supplier/Contractor to make good the failure or neglect or contravention and if the Supplier/Contractor fails to comply with the notice within time considered to be reasonable by the Purchaser, the purchaser may black list or suspend business dealings with the supplier/contractor apart from forfeiture of security etc.

2.16 WARRANTY:

The Supplier/Contractor shall be responsible to replace free of cost with no transportation and insurance expenses to the Purchaser up to the destination of material/equipment, the whole or any part of the material, which under normal and proper use and maintenance proves defective in material or workmanship within **12 months from the date of commissioning or 18 months from the date of dispatch whichever expires earlier**, provided the Purchaser gives prompt written notice of such defects to the Supplier/Contractor. Such replacement shall be affected by the Supplier/Contractor within a reasonable time not exceeding six months of the intimation of defects. Supplier's/Contractor's responsibility arising out of supply of material or its use whether on warranties or otherwise shall not in any case exceed the cost of correcting the defects or replacing the defective part/material and upon the expiry of the warranty period stipulated above, all such liabilities shall terminate. However this clause shall not be applicable in case of metal halide lamp. The above provision shall equally apply to the material so replaced/repaired by the Supplier/Contractor under this clause in case the same is again found

to be defective within 12 months of its replacement/repair. In case the replacement/repair of defective material is not carried out within six months of intimation of defects, the Supplier/Contractor shall have to pay interest @ 12% per annum on the value of each complete operational unit of equipment beginning from the date of its becoming defective up to date of its recommissioning after replacement/repair.

2.17 INSPECTION OF EQUIPMENT:

- a) The PSTCL shall inspect, examine and test the equipment/material through its official(s) and/or through an out-side agency nominated by PSTCL at the manufacturer's/Supplier's works, during or after the manufacture of goods prior to dispatch, on receipt of a clear notice of minimum two weeks in advance, to be reckoned from the date of receipt by the Purchaser. The Supplier/Contractor shall provide all facilities as may be required to carry out the tests in accordance with approved standards, free of cost.
- b) CE/TS shall get stage inspection carried out at random at supplier works.
- c) The random testing of material in the stores irrespective of the fact whether or not it was it was inspected before dispatch shall be carried out by PSTCL and in case of any failure the entire lot shall be rejected at the risk & cost of the supplier.

2.18 INTERCHANGEABILITY:

Corresponding parts of a plant / equipment shall be made to gauge or jig and shall be inter-changeable in every respect.

2.19 TRAINING FACILITIES:

The successful tenderer will be required to impart training to up to 2 Engineers and two technicians so as to fully acquaint them with Design, Testing and commissioning, including fault detection of protection schemes covered in this tender, if so desired by the Purchaser. The period of training shall be mutually agreed upon and all expenses shall be borne by the Purchaser.

2.20 CANCELLATION:

The Purchaser reserves the right to cancel the Purchase order as a whole or in part at any time or in the event of default on the part of the Supplier prior to the receipt of intimation regarding taking in hand of the manufacture of material against the Purchase Order/dispatch of material to the consignee.

2.21 RAW MATERIAL:

The raw material to be used in the manufacture of the goods/equipment to be supplied against Purchase Order/Contract shall be of the best quality of its kind obtainable in the market. The Supplier shall be solely responsible for the procurement of raw material required for the purpose.

2.22 MATERIAL & WORKMANSHIP:

All the materials used in the manufacture of equipment shall be of the best quality obtainable of their respective kinds and whole of the work shall be of the highest class, well finished and of approved design and make.

2.23 CHANGES:

No variation or modification or waiver of any of the terms and provisions shall be deemed valid unless mutually agreed upon in writing by both the Purchaser and the Supplier.

2.24 PACKING:

All material should be suitably packed for transportation direct to the consignee and the Supplier shall be responsible for all damages/losses due to improper packing. All boxes shall be marked with the signs indicating up and down sides of the boxes and also unpacking instructions considered necessary by the Supplier. The contents of boxes shall have place marks corresponding to the number in the packing lists to enable easy identification. The prices quoted by the Tenderers shall be deemed to include the cost of packing.

2.25 TEST CERTIFICATES AND INSTRUCTION BOOK:

The Supplier/Contractor shall be required to furnish to the Purchaser's office/consignees, where-ever necessary, the following documents along with the consignment:

- i) Printed pamphlets & catalogues. 5 copies
- ii) Instruction Books. 5 copies
- iii) Drawings. 5 copies
- iv) Any other relevant information 5 copies

(to be incorporated at the time of placing the Purchase Order)

In case the goods have not been inspected/tested at the manufacturer's works by the representative of the PSTCL, the Supplier/Contractor shall furnish the following certificates along with consignment for facility of the consignees:-

a) Type Test Certificates

b) Routine Test Certificates

2.26 CONSTITUTION, EXPERIENCE AND FINANCIAL STANDING:

The Tenderers should invariably supply the following information with the tenders:

a) Constitution and composition of the firms:

- i) If a joint stock company, copy of its Memorandum and Articles of Association and other particulars.
- ii) If partnership, a copy of the partnership deed, particulars of partners.
- iii) If a proprietary concern, the standing of the proprietor and if registered with the Registrar of Companies/Firms, their registration No.

b) In case of authorized representative:

- i) Name & particulars of manufacturers.
- ii) Certified copy of the Instrument of Authorization of the Supplier/Manufacturers.
- c) Experience and standing in the market.
- **d**) Particulars of Purchase Orders/Contracts executed with this PSTCL (Formerly PSEB) and other Boards/Government Department as per "Performance Schedule" attached herewith as `Annexure-D'.

e) Financial Position:

- i) Balance sheet for the last three years including Trading, Manufacturing, Profit and Loss Account.
- ii) Bank references.

2.27 DESPATCH INSTRUCTIONS:

The material shall be required to be dispatched as per the dispatch instructions issued by the Purchaser.

2.28 EXTENSION IN DELIVERY PERIOD:

Any genuine delay in approval of technical details, drawings, issuance of amendment of Purchase Order, conducting inspection and approval of Inspection Test Reports/Test Certificates for allowing dispatches etc., will count towards extension of the delivery period by corresponding period other than admissible under Force-Majeure conditions, if any, substantiated by the Supplier and duly accepted by the Purchaser. No Extension in delivery shall be granted in case of delay in payment. However, for delayed payments beyond stipulated period as per terms of payment clause, compensation shall be credited @ 0.5% of the payment so delayed per month or part thereof to be adjusted against penalties levied or to be levied subject to a maximum of penalty leviable due to delay in deliveries under the contract.

2.29 CIVIL SUIT/JURISDICTION:

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

2.30 UNDERTAKING:

All the Tenderers are required to give the following undertakings on their letter head with the tender documents:

- i) That they would not pay any commission etc. or engage any commission agent for dealing with PSTCL in any matter including purchase of equipment etc
- ii) That no officer/official of the PSTCL will deal with any person who claims to be a commission agent or liaison agent of any company and that the officers/officials of the PSTCL must deal only with persons directly employed by the Suppliers.

2.31 PLACE(S) OF MANUFACTURE:

The equipment shall be brand new. The tenderer shall state the make, place(s) of manufacture as well as the places of testing and inspection of the equipment offered in his tender. It shall also be stated whether the equipment offered carries ISI: certification mark or not. The material carrying ISI mark will be preferred.

2.32 SPECIAL INSTRUCTIONS:

- i) Incomplete tenders not submitted on the lines indicated above are liable to be rejected without correspondence.
- ii) Request for extending the due date of tenders will be ignored.
- iii) The tenders from the direct manufacturers or their sole selling agents only will be considered.
- iv) No printed general conditions of Sale attached with the tender shall be accepted.
- v) Tenders shall be accepted only from those firms or their authorized agents who purchase a copy of this tender specification.
- vi) Only indigenous offers or such offers in which no import license is required would be considered.

- vii) Comments if any, on the clauses contained in the 'General Terms And Conditions' as well as in the Technical Specification should be offered, while submitting tenders, otherwise it will be presumed that all clauses stipulated therein are acceptable.
- viii) The tender must be accompanied by detailed and fully dimensioned drawings of the equipment, technical particulars and detailed literature.
- ix) Purchaser reserves the right to modify the schedule of requirement, technical particulars and the specifications at any time to place the order as a whole or in parts and to reject any or all the tenders received without assigning any reason. He will not be responsible for and will not pay for the expenses or losses that may be incurred by the tenderer in the preparation of the tenders.
- x) The material offered should be strictly according to the spec. laid down in this specification. The quotation should also indicate the make of the manufacturer, brand and company and should be accompanied with other technical literature, drawings etc. as required in the succeeding parts of this spec. at the cost of the supplier.

2.33 ARBITRATION:

- a) If at any time any question, dispute or difference, what so-ever, shall arise between the Purchaser/PSTCL and the Contractor/Supplier, 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 by a nominee of the Purchaser/PSTCL, who shall give a reasoned/speaking awards. The award of the Sole Arbitrator shall be final and binding on the parties under the provision of the Indian Arbitration Act, 1996 and the rules there under. Any statutory amendment, modification or re-enactment thereof for the time being inforce, shall be deemed to apply to and be incorporated in the Contract/Purchase Order. It will not be objectionable if the Sole Arbitrator is an officer of the PSTCL and he has expressed his views on all or any of the matters in question of dispute or difference.
- b) 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.
- c) The work under the Contract shall, if reasonably possible, continue during the arbitration proceedings and no payment due or payable by the Purchaser/PSTCL shall be with-held on account of such proceedings.

2.34 REQUIREMENT:

The quantity mentioned in this Specification can be increased or decreased at the time of actually placing the order.

2.35 ORDER PREFERENCE

The PSTCL would allow an order preference to such tenderers whose works are situated within the State of Punjab as per the procedure laid down as under:-

a) The rate of Punjab firms would be de-escalated by 15% for all the units. For Punjab based firms up to 20% of the total quantity can be reserved provided they fall in the consideration zone after application of price differential. For this purpose the merit position of the Punjab firms shall be prepared separately, however, where the, Punjab

firms qualify amongst the lowest bidders on their own quoted rates, they shall form part of the original quoted list for the purposes of placing orders.

- b) The zone of consideration for placing of purchase order/contract would thereafter be demarcated taking into account the quantity of material required as per NIT and the quantities offered by the different tenderers.
- c) The purchase on the Punjab firm claiming order preference and falling within this Zone would placed on the lowest rate of a firm not claiming order preference within the Zone of consideration or on the concerned Punjab firm's own quoted rate whichever may be lower.
- d) In the event of zone of consideration ending at the deescalated rate tendered by a firm claiming order preference, the rate to be allowed to such firms shall be the next quoted rate by the firm not claiming order preference or the concerned firm's own quoted rate, whichever may be lower.
- The Punjab based firms claiming order preference shall be required to furnish an e) undertaking in prescribed form (Annexure-G) on a non-judicial stamp papers of appropriate value to the effect that they shall execute the order if placed on them under 'Order preference' as per tender specification. Such undertaking should be submitted by the Punjab based tendering firms latest by the close of the day of opening of tenders. In case, no such undertaking is furnished by the Punjab based firms who are otherwise eligible for claiming 'Order Preference' as per the tender specification ,their tender shall not be considered for placement of any order under Order Preference. In the event of refusal by the Punjab based firms to execute the purchase order/contract at their quoted rates or offers made under Order Preference as per 'c' and 'd' above as the case may be after having furnished the above undertaking, their Earnest Money shall be forfeited apart from initiating further administrative action, such as suspending business dealings, blacklisting etc.

2.36 QUALIFICATION REQUIREMENT:

To be technically suitable, the bidder should have manufactured and delivered the material/ equipment of similar or higher rating to an Electricity Board/utility and performance certificates clearly specifying the period from the date of commissioning to date of issue of such certificate for at least two years from two Govt. SEBs/Utilities of India issued by not below the rank of Executive Engineer is submitted along with the tender documents. The performance certificates should not be more than 15 years old as on the date of tender opening. The turnover during last three financial years and total value of similar equipment or higher rating (voltage as well as current) supplied during last three financial years by the firms shall be as under:-

S.No.	Description	Total turnover For last three Financial years	Total value of similar equipment supplied during last three years
1	15 KV NCT's	More than Rs. 40 lacs	More than Rs 10 lacs

Bidder shall attach the proof in respect of the above along with the tender and the aspect will be examined during the technical evaluation of the tender.

2.37 FAKE INSPECTION CALL:-

If the firm does not get the material inspected when the inspecting officer(s) visit their works after receipt of inspection call on one pretext or the other, it will have to bear TA/DA for the journey performed by such inspecting officer(s) which shall be Rs.15000/-(outside Punjab) & Rs.5000/-(within Punjab) per visit of Inspecting officer(s). Beside the recovery against each fake call, a letter of warning shall be issued and it shall be Rs.15000/- & Rs.5000/- per visit of Inspecting officer(s) respectively in case the material fails during inspection.

<u>SECTION-II</u> TECHNICAL SPECIFICATION

1. SCOPE:

This specification covers the design, manufacture, testing before dispatch, supply & delivery F.O.R. destination of 15KV NCTs for 220/132/66KV Sub-stations of Punjab State Transmission Corporation Ltd. complete in all respects as per ISS-2705 part-I to IV and IEC-44-1 revised/amended up to date and technical requirement covered under this specification.

2. CLIMATIC CONDITIONS:

ULLIIIIIIIIIIIII			
i)	Maximum temperature of air in shade	:	50 Deg.C
ii)	Minimum temperature of air in shade	:	- 5 Deg.C
iii)	Maximum temperature of air in contact	:	60 Deg.C
	with metallic portion in the sun		
iv)	Maximum relative humidity	:	100 %
V)	Average no. of thunder storm days per annum	:	20
vi)	Average no. of dust storm days per annum	:	40
vii)	Average no. of rainy days per annum	:	60
viii)	Maximum daily average ambient air temp	:	40 Deg.C
ix)	Maximum yearly average ambient air temp	:	35 Deg.C
x)	Average annual rainfall	:	150cm.
xi)	No. of months during which tropical	:	3
1	monsoon conditions prevail		
xii) l	Maximum wind pressure	:	195kg/m2
xiii) A	Atmospheric pollution	:	Heavy
xiv)	Earth quake incidence	:	Site susceptible to earth quakes
xv)	Altitude above Mean Sea level	:	Not exceeding 1000 Mtrs.

3. GENERAL REQUIREMENT:

The 15KV NCTs shall be outdoor, single phase, oil immersed, self cooled & hermetically sealed suitable for the services, indicated VA Burden, Accuracy class, Accuracy limit factor etc. required for 15KV NCTs are given in 'Schedule of requirement in Appendix-B. The NCTs shall be of LIVE Tank Design only.

The core of NCTs shall be non-ageing high grade M-4 type silicon laminated steel of low hysteresis loss and high permeability to ensure high accuracy at both normal & over currents/over voltages.

The primary winding may be of electrolytic high conductivity copper or aluminium tube. Sufficient area of cross-section shall be provided to cater for the short time as well as continuous thermal current ratings under site-conditions. The main insulation shall be of paper & oil combination having good mechanical strength with superior electrical properties and good ageing qualities to ensure long trouble free service.

The secondary winding shall be of high conductivity copper of suitable cross-section. The copper wire shall have enamel insulation and paper insulation may also be provided to enhance reliability. For obtaining different ratios, the secondary winding may be suitably tapped. The suitability of offered CTs will be checked with respect to no. of primary turns as compared to that of type tested CT, as per ISS and in case of any discrepancy, the offer is liable to be rejected.

The NCTs shall be effectively sealed preferably hermetically with Nitrogen gas to eliminate breathing and to prevent air & moisture from entering into the tank. It will be ensured that shape of external parts is such that the rain water does not accumulate. The NCTs shall be provided with oil level gauge of toughened prismatic glass marked with maximum & minimum levels. Background of oil, pressure relief valve/device/diaphragm type or both shall be provided for releasing abnormal pressure. A filling plug, the top and drain valve/plug at the bottom shall be provided. Suitable No. of cable glands for 4C, 4mm2 copper PVC cable shall be provided. All ferrous parts including nuts, bolts & washers etc. shall be hot dip galvanised. All necessary lifting lugs & fixing lugs with bolts, nuts etc. shall be provided by the firm.

4. SYSTEM PARTICULARS:

The 15KV NCTs shall be suitable for operating in 220KV, 132KV, 66KV & 11KV (Highest system voltage 245KV, 145KV, 72.5KV & 12KV respectively) solidly grounded system. The basic insulation level shall be 38KV/95KVP.

The equipment shall be suitable for giving satisfactory service when system frequency varies by +/-2.5% of normal 50Hz.

5. CO-ORDINATION:

The characteristics of the NCTs e.g. minimum knee point voltage, maximum exciting current, secondary winding resistance etc. shall be enclosed with the tender as per Schedule of Guaranteed & other Technical Particulars(Appendix-A).Minor changes in such characteristics may be necessary from the point of view of finally selected Protection Schemes by the Purchaser. The successful tenderer shall have to co-ordinate his design & specification of the NCTs with the requirements of the Protection Schemes finally selected by the Purchaser. Major changes, if any, shall also be carried out by the Supplier at the Purchaser's request but in that case the prices & delivery schedule may be affected, which will be subject to mutual agreement between the parties concerned.

6. TEMPERATURE RISE:

The maximum temperature attained by any part of the equipment in service at site under full load conditions and exposed continuously to the direct rays of the sun shall not exceed 40 Deg. C above the ambient temperature.

7. TERMINAL BOX:

The leads from the secondaries shall be brought out near the bottom of NCT and connected to heavy terminals in the terminal box, which will be fixed to the outer surface of the lower tank. The terminal box shall be of weather proof construction having a hinged/bolted door fitted with a locking arrangement. A diagram of terminal connections with various taps shall be mounted permanently on the inside of the door. A proper seal shall be provided all around the door to check the ingress of moisture/dust into the terminal box. The terminal arrangement of the terminal box shall permit convenient handling of connections to the outgoing PVC insulated and steel wire armored copper cable(s) entering from below. Inlet arrangement for the cable(s) to be provided shall be subject to approval of the purchaser.

The secondaries of all NCTs shall be fitted with shorting links in the terminal box before dispatch. The distance from top of secondary terminals to terminal box cover should not be less than 2 inches.

8. RATING PLATE:

Each NCT shall be riveted with a non-corrosive & non-rusting rating plate made of brass/anodized aluminium with all particulars marked in accordance with IS-2705 part-1 to 4/IEC standard amended up to date. Another similar plate showing connection diagram shall be provided on each NCT. PSTCL purchase order number and date shall be clearly written on both the plates.

Contact no. & e-mail id of the contact person for after sale service should be mentioned on the rating plate. Also the said details should be mentioned on the first page of the Instruction manuals.

9. TERMINAL CONNECTORS:

All the CTs shall be provided with appropriate rigid type bimetallic Twin configuration connectors for CTs ratio 600-300/1A, 200-100/1A, 500-250/1A & 1200-600/1A and Quadra Configuration for CTs ratio 2000-1000/1A suitable for ACSR Zebra conductor of 0.4 Sq["] copper equivalent. Connectors shall be suitable for horizontal/vertical take off.

10. FITTING & ACCESSORIES:

Besides any other items recommended by the manufacturer, a list of fittings and accessories whether specifically refer in the text of this specification or not but required to be incorporated with the NCTs is given below for ready reference:

- 1. Primary terminals (copper)
- 2. Terminal connectors for connections from line to the primary terminal.
- 3. Oil level gauge.
- 4. Pressure relief valve/device or diaphragm type or both.
- 5. Expansion chamber or other suitable type of device for absorbing variations in the Volume of oil due to change of ambient temperature.
- 6. Whether proof secondary box fitted with hinged/bolted door and complete with terminals & shorting links.
- 7. Lifting lugs.
- 8. Fixing lugs with bolts, nuts and washers for holding down the NCTs on the supporting structures.
- 9. Rating & diagram plates duly riveted.
- 10. Oil filling plug & drain valve.
- 11. Two numbers earthing terminals.

11. INSULATING OIL:

The insulation oil used in each NCT shall be Napthenic type (made from Napthenic crude) conforming to BS: 148/IEC-296 Class-I.

12. DRAWINGS, MANUALS & CATALOGUES:

In addition to drawings which the tenderer may enclose to show merits of his equipment, set of the following drawings along with illustrated and descriptive literature for all equipments

SPEC. STQ-5033 15 KV NCTs

offered must be submitted along with the tender, otherwise the tender may be treated as incomplete:

i) Drawing showing outlines of each NCT depicting front side and top views.

ii) Drawing showing inside details (Sectional View Drg.)

iii) Separate drawings showing internal details of upper tank, lower tank, terminal box, secondary terminals, primary re-connections, Bellows etc.

iv) Type test reports in respect of offered design & rating of NCTs.

v) Technical & descriptive literature explaining the details of the equipment.

vi) Magnetization curve for each of the secondary's of NCT.

vii) Drawing showing the connection & wiring diagrams of primary & secondary windings.

As soon as possible but not later than 7 days of the award of contract, the manufacturer shall supply 4 copies of drawings which will describe the equipment in detail for approval & shall subsequently provide 15 complete sets of final drawings.

Following booklets are also to be supplied as a part of the supply against this specification:-

i) One copy per NCT of instruction books, maintenance manuals & spare parts bulletins.

ii) One copy per NCT of descriptive literature and data on Neutral CTs.

Complete bill of material shall be given on all the drgs.

13. GUARANTEED AND OTHER TECHNICAL PARTICULARS:

Guaranteed & other technical particulars as called for in Appendix-A shall be furnished with the tender. Any other particulars considered necessary by the supplier may also be given in addition to those listed in Appendix-A. A tender lacking in supply of requisite information, as called for in Appendix-A, may be considered as incomplete and may be rejected out rightly.

14. INSPECTION AND TESTS:

Each NCT shall comply with the type tests as stipulated in latest edition of IS-2705/IEC or any other internationally recognised standards as mentioned in clause-2. Reports of all type tests (as mentioned in the latest edition of IS: 2705 & IEC-44-1) carried out on the equipment of offered design and rating shall be supplied along-with the tender. Type test reports indicating type tests carried out on 11KV/33KV/66KV CTs/NCTs shall also be acceptable.

The supplier shall notify the readiness of equipment 'for final inspection by purchaser. Unless otherwise agreed, the equipment shall be inspected and all the routine tests shall be witnessed by the purchaser's representative, if so desired by the purchaser.

Temperature rise type test at continuous thermal current rating shall be witnessed on one NCT of the each rating & ratio by the purchaser at the time of inspection, free of cost.

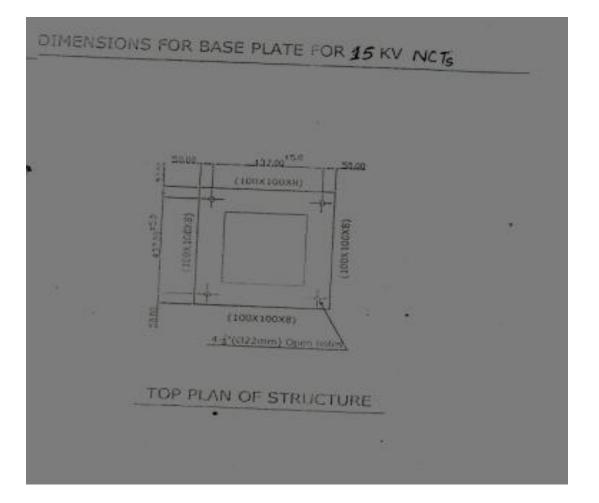
All the type/routine test reports shall be submitted and got approved from the purchaser before the dispatch of equipment. The equipment shall be dispatched as per the dispatch instructions to be issued by the purchaser.

15. BUSHINGS:

Bushings shall be of high grade & homogeneous Porcelain and shall comply with the requirement of IS-5621. Bushings of make WSI/ BHEL/ JSI/ Modern/IEC/CJI are acceptable. Bushing shall preferably be of cemented flange type.

16. FIXING ARRANGEMENT:

The equipment will be suitable for fixing on supporting structure, top plan of which is enclosed.



ANNEXUIRE-A

SCHEDULE OF GUARANTEED AND OTHER TECHNICAL PARTICULARS

- 1. Name of the manufacturer
- 2. Manufacturers type & designation
- 3. Rated system voltage
- 4. Highest continuous system voltage
- 5. C.T. Characteristic(to be given separately for each item & each core)
- a. Rated Primary Current
- b. Rated Secondary Current
- c. Rated Output (VA)
- d. Accuracy Class
- e. Accuracy Limit factor
- f. Instrument Security factor
- g. Min. knee Point Voltage
- h. Magnetizing Current at Knee point Voltage
- i. Sec. Winding Resistance at 75 Deg. C
- 6. Short Time current rating at all taps
- 7. Rated Dynamic current
- 8. Limits of temp. rise
- 9. Standard to which equipment confirms
- 10. One Min. power freq withstand test voltage on primaries
- 11. One Min. power freq withstand test voltage on secondaries
- 12. 1.2/50 Micro seconds impulse withstand voltage
- 13. Min. Creepage distance
- 14. Weight Of Oil
- 15. Source/ Grade of Oil
- 16. Min IR values at 20 Deg C Between
 - a. Primary & secondary
 - b. Primary & earth
 - c. Secondary & Earth
- 17. Max. value of dielectric dissipation factor (Tan-Delta)
- 18. Max. partial discharge
- 19. Total weight of CT
- 20. Overall dimension
- 21. Whether Pressure relief device provided
- 22. Type of Primary Winding
- 23. Material of Primary Winding
- 24. Cross sectional area of Primary winding

- 25. Cross sectional area of Secondary winding
- 26. Current density in primary winding at
 - a. Normal Current rating
 - b. Short time current rating
- 27. No. of Primary Turns
- 28. No. of Secondary Turns
- 29. Working Amps. turns per design
- 30. a. Material for protection cores
 - b. Material for metering cores
- 31. Percentage of rated current to which the CTs can be overloaded continuously without exceeding the permissible temp. limits
- 32. Whether various CTs ratios are achieved by providing primary inter connections or through secondary taps
- 33. Whether the design is dead tank or live tank
- 34. Whether CTs are of low reactance or of high reactance type
- 35. Means provided for hermetically sealing & absorbing volume changes of oil due to temp variation
- 36. Whether terminal for tan delta & partial discharge Measurement provided
- 37. Primary Terminal details :
 - a. Material
 - b. Cross sectional area
 - c. Length
- 38. Tanks
 - a. Whether tank are sand/shot blasted before painting
 - b. Material of both tanks & thickness
 - c. Dimension of both tanks (LxBxH)
 - d. Weight of both tanks
- 39. Bushing
 - a. Make
 - b. Creepage distance
 - c. Height.
- 40. Gakets
 - a. Type of Gaskets
 - (Nitrile Rubber Butyl gaskets / Cork sheets)
 - b. Make

(Cork sheet gaskets of make Talbors Faridabad or Nu-cork, Gurgaon or SRB Corksheets Vadodara or Cortica Mfg., Chennai or packing & jointings shall be preferred.

ANNEXURE-B

SCHEDULE OF TECHNICAL REQUIREMENT

15KV NCTs of ratio 600-300/1A, 2000-1000/1A, 200-100A/1A, 1200-600/1A & 500-250/1A with the following technical particulars:-

S.No. Description

1.	Rated Secondary Current	1A
2.	Purpose	REF Prot.
3.	Rated Output (VA)	25
4.	Accuracy Clss	5P
5.	Accuracy limit factor	15
6.	Size of primary terminal	Min.40mm Dia. & 80mm long(for item no.2 & 4) Min. 30mm Dia. & 80mmlong(for item no. 1,3&5)
7.	Short time current rating	20 KA for 1 sec.
7. 8.	Short time current rating Max. current density in Primary winding for normal current rating.	20 KA for 1 sec. 1.50A/mm2
	Max. current density in Primary winding for	
8. 9.	Max. current density in Primary winding for normal current rating.	

ANNEXURE- C

PROFORMA FOR SELF APPRAISAL/WORKS APPRAISAL

1.	A)	Name of Tendering firm.						
1.	i)	Complete address of the office.						
	ii)	Telegraphic address:						
	iii)	Telephone Number(S):						
	,	Fax No.						
	iv)	Fax No. Name of two responsible Officers with Designation: (Managing						
	v) D) i)	Name of two responsible officers with Designation. (Managing						
	B) i)	Director/Partner/Chief Engineer/Works Engineer etc.)						
	ii)	Day on which weekly holiday is obser	ved.					
	C)	Complete address of the works:						
	i)	Telegraphic address:						
	ii)	Telephone Number(S):						
	iii)	Fax No.						
	iv)	Name of two responsible Offi	cers with Designation: (Managing					
		Director/Partner/Chief Engineer/Work						
	v)	Day on which weekly holiday is obser	ved.					
	D)	Name, address & telephone numbers	s of two references having facilities of					
		P&T Telephones.						
	a) i)	Name	b) i) Name					
	ii)	Address	ii) Address					
	iii)	Telephone No.	i) Telephone No.					
2.		Year of Establishment.						
3.		Constitution of the firm.						
	a)	Private or Public Limited						
	b)	Registered under the companies Act of	r any other Act, give Registration No. &					
		Date.						
4.		Financial Position.						
	i) a	Land (Area & Value)						
	b	Building (Covered Area and Value)						
	с	Plant & Machinery:						
	d	Total drawing Limit from Banks						
	ii)	Annual Financial Turnover (duly audit						
	iii)	Latest Income Tax clearance certificat	es:					
5.		Man Power:						
	a)	Graduate Engineer (s):						
	b)	Diploma Holder (s):						
	c)	Skilled Workers:						
	d)	Un-Skilled Workers:						
6.		Production capacity per month of the	e item covered in your quotation and					
		justification for assessment.						
	a)	Details of Plant & machinery insta	lled (Please attach separate sheets, if					
		necessary).						
L								

r	1					
	b)	Details of raw material required:				
	c)	Source of raw material				
	d)	Stock of raw material				
	e)	In case, any raw materials are required to be imported, indicate arrangements				
		of its procurement.				
	f)	Quality Controls exercised in procurement of raw materials.				
7.	a)	Details of manufacturing process:				
	b)	Scheme of quality controls:				
	i)	During manufacturing process:				
	ii)	At the finished stage				
	c)	Whether, any record is being maintained in respect of quality controls				
		exercised.				
8.		Details of testing facilities available with the firm.				
9.		Details of orders executed/under execution during the last three years. Photo				
		copies of Purchase orders of similar material supplied to other state utilities				
		by them to the standard specified in these tender documents must be				
		submitted.				
	a)	With PSEB (Now PSTCL)				
	b)	Other State Electricity Boards/State Govt. /Govt. Of India & other				
		Institutions/undertaking:				
	c)	Other important customers.				
10.	a)	Whether the item (s) are on Punjab Govt./DGS&D/Central Govt. Approved				
		Rate Contracts (Attach copies of Rate contracts)				
	b)	Whether item offered conforms to ISS or any other internationally recognized				
		Standards, if so, give reference:				
	c)	Whether the firm is licensed to use ISI Mark of any other Govt. Quality Mark				
		(copies of latest Test Certificates issued by Govt. Laboratories/Any				
		recognized Test House be attached.)				

SIGNATURE OF AUTHORISED SIGNATORY OF THE FIRM WITH OFFICE STAMP

NOTE:

- 1. Please attach additional sheets, wherever required.
- 2. Copies of documents, attached with the Performa should be attested by the firm's authorized stamp mark of the firm.

ANNEXURE -D

SCHEDULE OF DEVIATIONS

A) All the technical deviations from PSTCL specification must be given hereunder, if no technical deviations are given in this schedule then it will be presumed that there are no technical deviations from PSTCL's specification.

Sr. No.	Details of deviations from Technical Specification	Remarks

Signature of tenderer.

B) All the deviations from PSTCL's general Terms and Conditions must be mentioned hereunder otherwise it will be presumed that there are no such deviations and the material shall be supplied as per PSTCL specification and General Terms and Conditions .

Sr. No.	Details of deviations General Terms & Conditions of Specification	Remarks

Signature of tenderer

ANNEXURE - E

PERFORMANCE SCHEDULE

(SEPARATELY FOR BIDDER AND COLLABORATION)

Sr.No	Size & brief Description of equipment	Order No. & date	Name of purchaser	Qty.(Nos.)	Value	Date since the equip- ment supplie Is in service	ed
1	2	3	4	5	6	7	8

Date_____

Signature: Name: Status: Whether authorized Attorney of the Tendering Co. Name of the tendering Company:

<u>ANNEXURE - F</u> SCHEDULE OF REQUIREMENT & PRICES

Item No.	Description of material	Qty. (Nos.)	Unit Ex-works FIRM rates incl. Packing & Forwarding (Rs.)	ED (Rs.)	CST (Rs.)	Unit F&I (Rs.)	Any other Tax	Unit all inc. FOR destination Price(Rs.)	Total all inc. FOR dest. Price (Rs.)
	15KV Class Single phase outdoor type NCTs complete in all respects as per spec.& schedule of requirement(Annexure-B) including terminal connectors with following ratios:	59							
i)	600-300/1A	09							
ii)	2000-1000/1A	09							
iii)	300-150/1A	02							
iv)	200-100/1A	20							
v)	1200-600/1A	12							
vi)	250-125/1A	03							
vii)	500-250/1A	04							

NOTE:

1. The above Performa should be filled by the tenderer duly typed. Hand written prices shall not be accepted.

2. The tenderer shall indicate the split up of ex-works prices separately indicating cost of raw material, labour component and overhead expenses on a separate Performa.

3. No overall discount shall be indicated on the quoted price or which split up has been furnished as per note under sr. no.2 above. However quantity/payment discount can be given in main tender. Any discount on quoted price or discount offered after opening of tender will lead to the rejection of tender.

Delivery Schedule:

The complete qty. is to be supplied within two months from the date of issue of purchase order. The drawings shall be submitted for approval within 15 days of receipt of PO.

<u>ANNEXURE – G</u>

UNDERTAKING FORM

(TO BE ENTERED ON A NON-JUDICIAL STAMPED PAPER OF RS.-----Only)

We _______state that our works are situated in the state of Punjab and we claim "Order Preference" as stipulated in the PSTCL tender specification No. ______ Due on ______ against which we have submitted out tender No. ______ Dt. _____.

We undertake to execute the order/contract if placed/awarded on to us even by counter offer at the rates worked out by PUNJAB STATE TRANSMISSION CORPORATION LTD in accordance with its Purchase Regulations. It is further understood that in the event of refusal by us or failure on our part to execute the order/contract(full or part) placed/awarded on to us under 'Order preference' on whatsoever. the PUNJAB STATE TRANSMISSION any account CORPORATION LTD shall have the right to forfeit the earnest money deposited by us and we shall have no claim for the refund thereof. The PUNJAB STATE TRANSMISSION CORPORATION LTD shall also have the right to suspend without prejudice to other rights accruing to the PUNJAB **STATE** TRANSMISSION CORPORATION LTD under the Purchase Order/ Contract if placed / awarded on to us.

Signature of Constituted Attorney.