

PRASAR BHARATI (BCI)
O/o THE ADDITIONAL DIRECTOR GENERAL (E-WZ)
ALL INDIA RADIO & DOORDARSHAN
DOORDARSHAN KENDRA COMPLEX
9TH FLOOR, P.B. MARG, WORLI
MUMBAI 400 0 30.

CEW / TVP / HPT BHUJ / 4 TR / 2011-2012

TEL-24928773
Date: 28.12.2011

NOTICE INVITING TENDER

Sealed Tenders are hereby invited on behalf of President of India from reputed and experienced contractors for Supply, Erection, Testing and Commissioning of 11KV/ 415V 250 KVA Plinth Mounted Sub-Station as per drawing, sketches, specifications attached, to this notice for High Power TV Transmitter, Bhuj,Gujarat, at an estimated cost of **Rs. 12,00,000/-**

1. The envelopes containing the tender (Technical bid & Financial bid in separate sealed envelop) should be enclosed and submitted in another large size envelope duly sealed and marked with the name of the work and date of opening. The envelope will be received by The Additional Director General (E-WZ), All India Radio & Doordarshan, Doordarshan Kendra Complex, 9th Floor, P.B. Marg, Worli, Mumbai -400 0 30 up to **15.00 hrs on 03.02.2012**. The technical bid will be opened by him or his representative at **16.00 hrs** on the same day. The date of opening of Financial bid will be intimated after opening of Technical bid. Tenders received without proper sealing will be summarily rejected.
2. The tender document can be obtained from the Cashier ,O/o The Additional Director General (Engg.)(WZ), All India Radio & Doordarshan, 101,3rd Floor, Old CGO Building,M.K. Road,Mumbai -400020, on payment of Rs. 1000/- in cash/demand draft drawn in favour of The Additional Director General (Engg.)(WZ), All India Radio & Doordarshan ,Mumbai up to **01.02.2012**
3. Tenderers should quote the tender amount in figures as well as in words in financial bid (Annexure -'D') separately. When a tenderer signs a tender in an Indian language, net amount tendered should also be written in the same language. In case of illiterates, the rates or the amounts tendered should be attested by at least two witnesses. The tenderers should mention their VAT/Sales Tax/ Service Tax registration number.
4. Earnest money amounting to **Rs.24,000/- (Rupees Twenty four Thousand Only)** in cash or Demand Draft drawn in favour of The Additional Director General, E- (WZ), All India Radio & Doordarshan, Mumbai should be enclosed with the Technical bid, failing which tender will be rejected.
5. The tenderer should be registered A-class contractor having Electrical License.
6. Tenders without information regarding past experience will be rejected.
7. Tenders which do not fulfill all or any of the above conditions or are incomplete in any respect, are liable to summary rejection.
8. The acceptance of a tender will rest with The Additional Director General (E-WZ), All India Radio & Doordarshan, Mumbai, who does not bind himself to accept the lowest tender and reserves the authority to reject any or all of the tenders without assigning any reason whatsoever.
9. Canvassing in connection with the tender is strictly prohibited and the tenders submitted by those who resort to canvassing will be liable to rejection.
10. Tenderer should affix his signature with rubber stamp at the bottom of pages of Annexure A to G, sketches and drawings.

11. The tenderer whose tender is accepted is required to remit Security Deposit of 10% of the contract value when the order is placed. Security Deposit will be released after the completion of guarantee period as mentioned under guarantee clause.

(R.SEKAR)
DEPYTY DIRECTOR (ENGG.)
For ADDL.DIRECTOR GENERAL(E-WZ)
AIR & DOORDARSHAN,MUMBAI
FOR & ON BEHALF OF PRESIDENT OF INDIA.

Encl:

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|--------------------------|---|---|
| 1. Annexure A | : | Special Terms & Conditions |
| 2. Annexure B | : | General Conditions of the Contract Schedule of work |
| 3. Annexure C | : | Schedule of works. |
| 4. Annexure D | : | Financial bid & memorandum |
| 5. Annexure E | : | Technical bid & memorandum |
| 6. Annexure F | : | Technical Specifications for 250 KVA Transformer and Substation <u>(Section I to III)</u> |
| 7. Annexure G | : | Inspection Procedure. |
| 8. Sketches & Drawing No | : | |
| | | 1. CEW 1220 / 96 (Typical line diagram) |
| | | 2. CEW 1221 / 2000 (Method of Plate Earthing) |
| | | 3. CEW 1302 / 2003 (Typical Plinth mounted S.S.) |
| | | 4. CEW 1303 / 2003 (Typical Sup-Station Plan) |
| | | 5. CEW 1304 / 2003/I (Details of Security fencing & Gate) |

ANNEXURE 'A'

SPECIAL TERMS AND CONDITIONS

A. PRICE & STATUTORY DUTIES

Prices should be firm and inclusive of all taxes, duties, octroi, freight, transit insurance and delivery charges to site.

B. I. DELIVERY

All materials should be delivered free of charges at site. The firm will arrange to receive the equipments at site. The purchaser shall however provide storage space to the firm for storing the equipments on the clear understanding that such storage is being arranged at the risk of the firm.

II. DELIVERY PERIOD

Supply and erection of the Sub-Station should be completed not later than 3 months from the date of issue of the L.O.I.

III. CONSIGNEE

INSTALLATION OFFICER,
TV RELAY CENTRE,
HIGH POWER TV TRANSMITTER,
BHUJ (GUJARAT)

IV. DESPATCH INSTRUCTIONS

The firm will dispatch the materials by road under insurance cover and freight paid by Contractor.

V. PAYMENT TERMS

90% of the contract price will be paid after Supply and Installation of Sub-Station Equipments complete with cable connection, earthing & security fencing etc, and balance 10% amount will be paid after inspection, Testing, Commissioning and handing over of the Sub-Station.

VI. SECURITY DEPOSIT

Security Deposit amounting to 10% of the Contract value in form of Bank Guarantee or Demand draft drawn in favour of “ **ADDITIONAL DIRECTOR GENERAL (E -WZ), AIR & TV, Mumbai**” shall be deposited by the tenderer immediately on receipt of work order. EMD will be treated as part of Security Deposit. The Security Deposit will be released after 12 months of satisfactory working of the sub-station from the date of taking over of the sub-station by the Installation Officer.

VII. INCOME TAX DEDUCTION

Income Tax at prescribed rate (**the rates applicable when the bill submitted**) will be deducted from the bill and the prescribed certificate for deduction will be issued.

VIII. BILLS

Bills in triplicate in the name of the “**ADDITIONAL DIRECTOR GENERAL (E -WZ), AIR & TV, MUMBAI**” along with the order references, inspection certificates shall be submitted to the Installation Officer.

IX. INSPECTION

I. INITIAL INSPECTION:

A. Inspecting authority Additional Director General (E- WZ)
All India Radio & Television,
101, M.K. Road,
Mumbai-400 020. or
His authorized representatives

B. Inspecting Officer

Additional Director General (E- WZ) or the Nominated officer will carryout the inspection at Contractor's factory and at works site during progress and final test. During pre-inspection by the Inspection Authority, if the consignment is not found as per specifications, the consignment will be rejected.

II. FINAL INSPECTION:

1. Final Inspection will be carried out by an authorised agency such as CEA or local electricity authority after completing the erection of Sub-Station and other associated works by the firm. Modification / alteration if any suggested by the inspecting authority will be carried out by the firm without any additional cost.

2. The firm should arrange to get clearance of Sub-Station drawings & layout, from the local electricity inspector and related agencies. Necessary arrangements should be made by the firm for testing of the Sub-Station.

X. GUARANTY TERMS

The material to be supplied under this order and work carried out will be Guaranteed by the supplier to be free from any manufacturing defect workmanship for a period of 12 (Twelve) months from the date of issue of the completion certificate by Installation Officer. The Security Deposit will be released after 12 (Twelve) months of satisfactory working of the sub-station from the date of taking over by the Installation Officer.

XI. PENALTY FOR DELAYED SUPPLY

In the event of failure to deliver the said equipments or to complete the works within the stipulated time, the purchaser has the right to impose penalty of Rs.500/- per week part thereof for every Rs. 75,000/- of the contract value subject to a maximum of 5% of Contract value.

XII. FORCE MAJEUR CLAUSE

If at any time, during continuance of this contract, the performance in whole or in part by either party of an obligation under this contract shall be prevented or delayed by reason of any war, hostility act of the Public enemy, Civil commotion, sabotage, fires, explosions, epidemic, quarantine restrictions, strikes, lockouts or act of God (here in after referred to as agents) and provided notice of happening of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reasons of such event, be entitled to terminate this Contract, nor shall either party have any claim for damages against the other in respect of such in-performance or delay in performance and delivery and the Contract shall be resumed as soon as practicable after such events have come to an end or ceased to exist and the decision of the Additional Director General (E- WZ), AIR & TV, Mumbai-30 as to whether the deliveries have to be resumed or not shall be final and conclusive.

XIII. REPEAT ORDERS

The purchaser reserves the right to place order for additional quantity up to 25% of the quantity ordered by them at the rates, terms and conditions of contract during the period of the Contract.

XIV CONDITIONS OF CONTRACT

a. That the purchaser reserves the right to recover from the contractor liquidated damage on the stores which the Contractor has to deliver within the delivery period for delivery.

b. That no increase in price on account of any statutory increase in fresh imposition of custom duty, excise duty leviable in respect of the stores specified in the acceptance of the tender shall be on such of the stores admissible as are delivered after the date of delivery stipulated in the acceptance of tender.

c. That notwithstanding any stipulation in the Contract for increase in price on any other ground, no such increase which takes place after the date of delivery stipulated in the acceptance of tender shall be admissible on such of DP stipulated in the acceptance of tender.

d. But nevertheless, the purchaser shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, sales tax or on account of any other tax or on any other ground stipulated in the price variation clause which takes place after the expiry of the delivery stipulated in the acceptance of tender.

e. Contractor shall not dispatch the stores till such time an extension in terms if para 'a' to 'd' is granted by the purchaser and accepted by the supplier. If the stores are dispatched by the supplier before an amendment regarding extension is issued by the purchaser and same are accepted by the consignee the acceptance of the stores shall be deemed to be subject to the conditions 'a' to 'd' set out in paragraph above.

ANNEXURE – ‘B’

GENERAL CONDITIONS OF THE CONTRACT:

Descriptive Literature and Drawings:

The tenderer shall submit the following along with their tenders.

1. Descriptive leaflets giving complete mechanical and electrical data about the equipment offered and drawing showing detailed dimensions of equipment wherever required along with single line drawing of HT / LT Schematic, sub-station setup.
2. Statement of technical specifications.
3. Layout of equipment and inter connections.
4. In the event of an order being placed a complete set of drawings (3 copies) showing details of equipments, interconnections along with details of circuit and components used shall be furnished. The firm will arrange to take approval of the sub-station schematic and drawings from local Electricity inspector for safety reasons and to follow local rules & regulations, so that charging of the sub-station is not unduly delayed by the concerned electricity board.
5. The tenderer shall make his own arrangements for storage of materials and their safe custody at site. The contractor shall make his own arrangements for procuring necessary labour skilled or unskilled and shall be responsible for conforming to all local regulations.
6. 3 copies of all drawings, instruction booklets for operation and maintenance with all other relevant documents shall be supplied by the tenderer alongwith the equipments.
7. Only easily available standard components should be used as far as possible. The equipment shall be designed for efficient and trouble free service for long periods of continuous operation. All materials used in construction shall be high quality and as per ISI specifications.
8. **Interpretation clause :** The president means the President of India and his successors. The Additional Director General (E-WZ)/ Director Engineering means the Additional Director General (E-WZ)/ Director Engineering for the time being of the zone concerned.
The expression “Works” where used in these conditions shall, unless there be something either in the subject or context repugnant to such constructions, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent and whether original, altered, substituted to additional. Words importing the singular number only include the plural number and vice-versa.
9. The person whose tender may be accepted (herein after called the contractor) shall within ten days of the receipt by him of the notification of the acceptance of his tender, deposit with the Additional Director General (E-WZ) in cash or demand draft drawn on any nationalized bank favouring Additional Director General (E- WZ) , All India Radio & Doordarshan, Mumbai a sum sufficient with the amount of the earnest money deposited by him with his tender to make up the full security deposits specified in the tender. All compensation or other sums of money payable by the contractor to Government under the terms of his contract or otherwise may be deducted from, or paid by the sale of a sufficient part of this security deposit, or from the interest arising there from or from any sums which may be due or may become due to the contractor by government on any account whatsoever and in the event of his security deposit being reduced by the reason any such deduction or sale as aforesaid, the contractor shall within ten days thereafter make good in cash or government securities endorsed as aforesaid any sum or sums which have been deducted from, or raised by the sale of this security or any part thereof.
10. The contractor is to provide everything of every sort and kind which may be necessary and requisite for the due and proper execution of the several works included in the contract whether original or altered according to the intent and meaning of the drawings and specifications taken together which are to be signed by the Additional Director General (E-WZ) / Director Engineering and contractor whether the same may or may not be particularly described in the specification or shown on the drawings, provided, that the same are reasonable to be inferred therefrom and in case of any discrepancy between the drawings and the specifications Additional Director General (E- WZ) / Director Engineering is to decide which shall be followed. However the Additional Director General (E- WZ) / Director Engineering may at his option, on the request of the contractor provide with such tools or accessories as may be at his disposal and can be conveniently loaned to him. If the Additional Director General (E- WZ) / Director Engineering agrees to provide the contractor with any tools or accessories, the contractor shall deposit as condition precedent a refundable

security to the extent of full value of the materials so be loaned to him. The decision of the Additional Director General (E- WZ) / Director Engineering as to the value of the materials shall be final and binding.

The contractor shall be responsible for collecting these tools or accessories from such office, as the Additional Director General (E- WZ) / Director Engineering may specify, and shall hold the same at his risk and be responsible for and make good their loss or damage due to any cause whatsoever and may ensure return of the same at his cost in as good as condition as these were loaned, fair wear and tear excluded, to such place as may be specified by the Additional Director General (E- WZ) / Director Engineering. The security amount shall be arranged to be refunded to the contractor by the Additional Director General (E- WZ) / Director Engineering on return, in good condition, of the loaned items.

11. The contractor shall also provide all necessary fencing and lights required to protect the public from accident, and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay and damages and costs which may awarded in any such suit, action or proceedings to any such person or which may, with the consent of the contractor be paid to compromise any claim by any such person.
12. The contractor is to setout the whole of the works in conjunction with an officer to be deputed by the Additional Director General (E- WZ) / Director Engineering, and during the progress of the works to amend on the requisition of the Additional Director General (E- WZ)/ Director Engineering any errors which may arise therein and provide all the necessary labour and materials for so doing. The contractor is to provide all plant, labour and materials which may be necessary and requisite for the works. All materials and workmanship are to be the best of their respective kinds. The contractor is to leave the works in all respects clean and perfect at the completion thereof. All materials supplied to the contractor and found surplus after the completion of the work shall be returned to the Additional Director General (E- WZ) / Director Engineering in good condition.
13. Complete copies of the drawings and specification signed by the Additional Director General (E- WZ) / Director Engineering shall be furnished by him to the contractor for his own use, and the same of copies thereof shall be kept by the contractor on the site of the work. Inspection and supervision of the Additional Director General (E- WZ) / Director Engineering or his representatives and the contractor shall at all times during the usual working hours, and at all other times of which reasonable notice of the intention of the Additional Director General (E-WZ) / Director Engineering or his representative to visit the works shall have been given to contractor, either himself be present to receive orders and instructions or have responsible agent duly credited in writing present for the purpose. Orders given to the contractor's agent shall be considered to have the same force as if they had given to the contractor. The Additional Director General (E-WZ)/ Director Engineering may require the contractor to dismiss any person in the contractor's employ upon the works who may be incompetent or misconduct himself and the contractor is forthwith to comply with such requirements.
14. The contractor is not to vary or deviate from the drawings, specifications or instructions or execute any extra work of any kind whatsoever unless upon the authority of the Additional Director General (E-WZ) / Director Engineering to be sufficiently shown by order in writing or by any plan or drawing expressly given and signed by him as an extra or variation or by any subsequent written approval signed by him. If compliance with the Additional Director General (E-WZ) / Director Engineering aforesaid order, plan or drawing of approval involves extra work and or expense beyond that involved the execution of the contract works, then unless the same were issued in consequence of some breach of this contract on the part of the contractor, the latter shall be entitled to be paid the price of the said work an or the expense aforesaid.
15. The Additional Director General (E-WZ) / Director Engineering shall have power to make any alteration in deletions from, additions to or substitutions for the original specifications, drawings, and instructions, that could not be envisaged earlier and become a necessity for the technical or other reasons and the contractor shall be bound to carry out the work in accordance with any instructions which may be given to him in writing signed by the Additional Director General (E-WZ) / Director Engineering. Such additions, deletions, alterations or substitutions shall not vitiate the contract but shall be measured, valued and certified by the Additional Director General (E-WZ) / Director Engineering and the rate for such additional items of work will be the same as for similar items of work in the contract; in

the case of lumpsum contracts, such rates will be determined on a proportionate basis, vis., value by total work. If however, it is not possible to fix the rates in this fashion, a rate mutually agreed to by the contractor and the Additional Director General (E-WZ) / Director Engineering will apply.

16. The Additional Director General (E-WZ) / Director Engineering shall have full power to ask the contractor to stop the work for a total period of seven days either at a time or intermittently without any compensation whatsoever being paid to the contractor and the contractor shall stop the work as and when asked by the Additional Director General (E-WZ)/ Director Engineering. This period shall not include the days on which the contractor may stop work of his own accord and at his own responsibility or as a result of damage to any part of the equipment owing to accidents during the execution of work.
17. The contractor shall give not less than five days notice in writing to the Additional Director General (E-WZ)/ Director Engineering before covering up or otherwise placing beyond the reach of measurement any work in order that additions, omissions and alterations not covered by the original contract may be measured, and corrected dimensions thereof be taken before the same are so covered up or placed beyond the reach of measurement, any work without the consent in writing of the Additional Director General (E-WZ)/ Director Engineering and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained, the same shall be uncovered at the contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.
18. All work and materials brought and left upon the ground by the contractor or by his orders for the purpose of forming part of the works are to be considered to be the property of the President of India and the same are not to be removed or taken away by the contractor or any other person without the special license and the consent in writing of the Director Engineering be the President is not to be in any way answerable for any loss or damage which may happen to or in respect of any such work or materials either by the same being lost or stolen or injured by or otherwise.
19. The Additional Director General (E-WZ) / Director Engineering has full power to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default the Additional Director General (E-WZ) / Director Engineering will be at liberty to employ other person or remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Additional Director General (E-WZ) / Director Engineering has full power to require other proper materials to be substituted therefore and in case of default the Additional Director General (E-WZ)/ Director Engineering may cause the same to be supplied and all costs which may attend such removal and substitution are to be borne by the contractor.
20. If in the opinion of the Additional Director General (E-WZ) / Director Engineering any of the works have been executed with improper materials or defective workmanship, the contractor is, when required by the Additional Director General (E-WZ) / Director Engineering forth with to re-execute the same and to substitute proper material and workmanship and in case of default of the contractor in so doing within a week the Additional Director General (E-WZ)/ Director Engineering has full power to employ other persons to re-execute the work and the cost thereof shall be borne by the contractor.
21. Any defects, shrinkage or other faults which may appear within one year from the completion of the work arising out of defective workmanship are upon the direction of the Additional Director General (E-WZ) / Director Engineering to be amended and made good by the contractor at his own cost (unless the Additional Director General (E-WZ) / Director Engineering shall decide that Govt. ought to pay for the same) and in case of default the President may recover from the contractor the cost of making good the work (of which the certificate of the Additional Director General (E-WZ) / Director Engineering shall be final) from any sum that may be then or at any time thereafter may become due to the contractor by the Government under the contract or otherwise of from his security deposit, or the proceeds thereof, or of a sufficient portion thereof.

22. (a) From the commencement of the works to the completion of the same they are to be under the contractor charge. The contractor shall remain responsible for the same and for the proper execution of the work according to specifications and direction of the Additional Director General (E-WZ) / Director Engineering. In the event of loss or damage to Government property or materials directly handed over to the contractor or otherwise existing in the premises where work is being executed by the contractor at any stage of progress of the work the Additional Director General (E-WZ) / Director Engineering shall have option to decide on primary available evidence, the likely liability of the contractor towards the damages as contemplated is in this clause, if in his opinion it be necessary to do so to protect Government interest.

The Additional Director General (E-WZ) / Director Engineering shall in cases where he decides that the contractor has incurred liability communicates to the contractor the extent of his liability and call upon him to pay the same within a specified date. On the contractor's failure to comply the Additional Director General (E-WZ) / Director Engineering shall have the right to deduct the amount of damage so assessed from the interest arising from the security furnished of from any sum including the security deposit which may be due or may due to the contractor by Government on any account whatsoever. Such actions shall be held valid till a final decision on the liability for he damages is arrived at in the matter through arbitration (if necessary), on the reference to arbitration, the arbitrator considers the findings of the Additional Director General (E-WZ) / Director Engineering not maintainable, the Government shall forthwith return the money deducted as aforesaid. The contractor is to be held responsible for and to make good all injuries, damages and repairs occasioned or rendered necessary to the said tools and accessories and other materials by fire or other causes and to hold the President harmless from any claims or injuries to persons or for structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the contractor or of any one in his employ during the execution of the work.

b) If the contractor or his workers or servants shall break, deface, injure or destroy any portion of the premises in which they may be working or any building, road, road curbs, fence, enclosure water pipes, cables drains electric or telephone posts or wires, trees, grass or grassland or cultivated land, contiguous to the premises on which the work or any part of it is being executed, the contractor shall make good the same at his own expense, or in default the Additional Director General (E-WZ) / Director Engineering may cause the same to be made good by other workmen, and deduct the expense (of which the certificate of the Additional Director General (E-WZ)/ Director Engineering shall be final) from any sums that may be then, or at any time thereafter become due to the contractor from Govt. under the contract or otherwise, or from his security deposits, or the proceeds thereof, or of a sufficient portion thereof.

23. The Additional Director General (E-WZ) / Director Engineering is to have full power to send workmen upon the premises to execute fittings and other works not included in the contract for whose operations the contractor is to afford every reasonable facility during ordinary working hours provided that such operations shall be carried on in such a manner as not to impede the progress of the work included in the contract but the contractor is not to be responsible for any damage which may happen to or be occasioned by any such fitting or other works.

24. The works comprised in this tender are to be commenced immediately on receipt of written orders from the Additional Director General (E-WZ) / Director Engineering to commence work. The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract be proceeded all due diligence (time being deemed to be of the essence of the contract on the part of the contractor and the contractor shall pay as compensation an equal amount to Rs.500/- for every week that the work remains uncommenced or unfinished, after the proper dates.)

25. In any case in which under any clause or clause of the contract the contractor shall have rendered himself liable to pay compensation amounting to whole of his security deposit (whether paid in one sum deducted by installments) or 50% of the amount of the contract whichever is less or committed a breach of any of the terms contained in clause 26, the Additional Director General (E-WZ) / Director Engineering on behalf of the President shall have power to adopt any of the following coursed, as he may deem best suited to the interests of Government:

- a) To rescind the contract (of which rescission notice in writing to the contractor under the hand of the Additional Director General (E-WZ) / Director Engineering shall be conclusive evidence) and in which case the security deposit of the contractor shall stand forfeited, and be absolutely at the disposal of Government.
- b) To employ labour paid by the Doordarshan and to supply materials to carry the work, or any part of the work, debiting the contractor with the cost of the labour and the price of the materials of the amount of which cost and price a certificate of the Additional Director General (E-WZ) / Director Engineering as to the value of the work done shall be final and conclusive against the contractor.
- c) To take such part of the work as shall be unexecuted out of his hands, and to give it to another contractor to complete, in which case any expenses which may be incurred in excess of the sum which would had been paid to the original contractor if the whole work had been executed by him (of the amount of which excess the certificate in writing of the Additional Director General (E-WZ) / Director Engineering shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by Government under the contract or otherwise or from his security deposit or the proceeds of sale thereof, or as sufficient part thereof.

In the event of any of the above courses being adopted by the Additional Director General (E-WZ) / Director Engineering the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements, or made any advances on account of, or with a view to the execution of the work or the performance of the contract. And in case the contract shall be rescinded under the provision aforesaid the contractor shall not be entitled to recover or be paid any sum for any work therefore actually performed under this contract, unless and until the Additional Director General (E-WZ) / Director Engineering will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value to certified.

26. In any case in which any of the powers conferred upon the Additional Director General (E-WZ) / Director Engineering by clause 17 thereof, shall have become exercisable and the same shall not be exercised, the non-exercise thereof, shall not constitute a waiver of any of the conditions hereof and such power shall, be exercisable in the event of any future case of default by the contractor for which by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit, and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Additional Director General (E-WZ) / Director Engineering putting in force either power (a) or (c) vested in him under the proceeding clause he may, if so desires take possession of all or any tools, plant, materials and stores, in or upon the works, or the site thereof or belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates, or in case of these not being applicable, at current market rates to be certified by the Additional Director General (E-WZ) / Director Engineering whose certificate thereof shall be final, otherwise the Additional Director General (E-WZ) / Director Engineering may by notice in writing to the contractor or his clerk of works, foreman or other authorized agent require him to remove such tools, plant, materials or stores for, the premises (within a time to be specified in such notice), and in the event of the contractor failing to comply with any such requisition the Additional Director General (E-WZ) / Director Engineering may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respect and the certificate of the Additional Director General (E-WZ)/ Director Engineering as to the expense of any such removal and the amount of the proceeds and expense by any such sale shall be final and conclusive against contractor.
27. Provided nevertheless that the contractor shall be of the opinion that he is entitled to any extension of time and account of the works being altered varied or added to or on account of any delay by reason for any inclement weather or causes not under the control of the contractor in consequence of orders to that effect from the Chef Engineer / Director Engineering who orders, the Additional Director General (E-WZ) / Director Engineering is hereby empowered to give him in any or either of such cases it shall be competent for the Additional Director General (E-WZ) / Director Engineering by an order in writing to extend the aforesaid period for final completion by a such period or periods as he shall deem reasonable and the contractor is to complete the works within such extended period or periods as aforesaid, provided that the contractor shall not be entitled to any extension of time unless he shall within three days after the happening of the event in respect of which he

shall consider himself entitled to any extension given to the Additional Director General (E-WZ)/ Director Engineering written notice of such claim to any extension of time and of the ground or grounds and of the amount thereof unless in any case the Additional Director General (E-WZ) / Director Engineering shall in his discretion dispense with such notice and certify for any extension of time, nevertheless and in case of any extension of time the aforesaid provision for damages and their amount in default of due completion shall apply in case on non-completion of the works within the extended time. The Additional Director General (E-WZ) for reason stated may at his discretion waive the penalties of clause 16 even in the absence of the notice or certificate.

28. The contract shall not be assigned or sublet without the written approval of the Additional Director General (E-WZ) / Director Engineering. And if the contractor shall assign or sublet his contract or attempt so to do, or become insolvent or commence any insolvency proceedings or make any composition with his creditors, or attempts so to do, or if any bribe, gratuity gift, loan requisite reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the contractor or any of his servants or agents to any public officer or person in the employ of Government in any way relating to this office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Additional Director General (E-WZ) / Director Engineering and may thereupon by notice in writing rescind the contract and the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of Government, and the same consequences shall ensue as if the contract had been resigned under clause 17 hereof and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.
29. Payments due to the contractor will be made by cheques. Nothing herein contained shall operate to create in favour of the bank any rights or equities vis-à-vis the President of India.
30. A certificate of the Additional Director General (E-WZ) / Director Engineering or an award of the referee hereinafter referred to as the contractor is to be conclusive evidence of the works having been duly completed and that the contractor is entitled to receive payment of the final balance, but, without prejudice to the liability of the contractor under the provisions of clause 13. No such certificate shall, however, be given, nor shall the work be considered to be completed until the contractor shall have removed all scaffolding, surplus materials and rubbish, and cleaned off the dirt from all wood work, doors, windows, walls, floors, or other parts of any building in, upon or about which the work is to be executed, or of which he may have had possession for the purpose of the execution thereof, not until the additions, omissions and alterations referred to in clause 8 shall have been measured by the Additional Director General (E-WZ) / Director Engineering whose measurements shall be binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish, and cleaning off dirt on or before the date fixed for the completion of the work, the Additional Director General (E-WZ) / Director Engineering may at the expense of the contractor remove such scaffolding surplus materials and rubbish and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall forthwith pay the amount of all expense so incurred, and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof
31. No female shall be employed by the contractor.
32. No labourer below the age of eighteen years shall be employed on the work.
33. Fair Wage Clause.
 - a. The contractor shall pay not less than fair wage to labourers engaged by him on the work.

EXPLANATION
'FAIR WAGE' means wage whether for time or piece of work fixed by law or otherwise and notified at the time of inviting tenders for the wages prescribed by the C.P.W.D. for the district in which the work is done.
 - b. The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid a fair wage to labourers indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labourers had been immediately employed by him.
 - c. In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this Agreement, the contractor shall comply with or cause to be complied with the Central Public Works Department Contractors Labour Regulation made by Government in regard to Payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorisedly made, maintenance of

employment wage register, wage cards, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of a like nature.

- d. The Additional Director General (E-WZ) / Director Engineering shall have the right to deduct, from the money due to the contractor, any sum required or estimated to be required for making good the loss suffered by a worker or workers by reasons of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages, which are not justified by their terms of the contract or non-observance of the regulations.
 - e. Vis-a vis Central Government the contractor shall be primarily liable for all payments to be made under, and for the observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractor.
 - f. The regulations aforesaid shall be deemed to be part of this contract and any breach thereof shall be a breach of contract.
34. The Contractor shall adhere to (1) The Minimum Wages Act, (2) The Workman's Compensation Act, (3) The Factories Act and other relevant Labour Laws.
 35. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.
 36. In the case of a tender by partners any change in the constitution of the firm shall be forthwith notified by the contractor to the Additional Director General (E-WZ)/ Director Engineering for his information.
 37. All disputes, differences or question including the subject matter of the contract or the rights and liabilities of the parties, hereunder or howsoever arising between the parties except those, the decision where is herein before otherwise expressly provided for shall be referred to the sole arbitration of the Director General or any person nominated by him and his decision shall be final and binding on the parties. The provisions of Arbitration Act, 1940 or any statutory modifications or re-enactment thereof and the rules made thereunder for the time being in force shall apply to such arbitration. Work under the contract shall, if reasonably possible, continue during the arbitration proceeding.
 38. If at any time after the commencement of the work the President shall for any reason whatsoever not require the while thereof as specified in the tender to be carried out, the Additional Director General (E-WZ)/ Director Engineering shall give notice in writing of the fact to the contractor who shall have no claim to any payment or compensation whatsoever on account of any profit or advantages which he might have derived from the execution of the work in full but which he did not derive in consequence of the full amount of the work not having been carried out neither shall he have any claim for compensation by reasons of any alteration having been made in the original specification, drawings and instructions which shall involve any curtailment or increase of the work as originally contemplated.
 39. In the case of any class of work for which there is no such specification as is mentioned in Rule 1, such work shall be carried out in all respect in accordance with the instructions and requirements of the Additional Director General (E-WZ)/ Director Engineering.
 40. The contractor shall at all times indemnify the President against any claim which may be made under the Workman's Compensation Act.1923 or any statutory modification thereof or other wise for or other wise for or in respect of any damages or compensation in consequence of any accident or injury sustained by any workman or other person whether on the employment of the contractor or not. In every such case including cases in which by virtue of the provisions of Section 12, sub-section (1) of the workmen's Compensation Act, 1923 Government is obliged to pay compensation to a workman employed by the contractor in execution of the work, Government will recover from the contractor the amount of the compensation so paid and without prejudice to the rights of Government under Section 12, sub-section (2) of the said Act, Government shall be at liberty to recover such amount or any part thereof by deducting if from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise.
 41. Government shall not be bound to contest any claim made against it under Section 12, sub-section (1) of the said Act, except on the written request of the Contractor and upon his giving to Government full security for all costs for Which Government might become liable of consequence of contesting such claim.

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Director General for the time being who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

ANNEXURE 'C'

SCHEDULE OF WORK

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 11KV / 415V, 250KVA PLITH MOUNTED SUB-STATION AT HPT BHUJ, GUJARAT.

This work is to be carried out as per CEW Drg. No. CEW 1302 / 2003 Drg. No. CEW / 1303 / 2003 and Drg. No. CEW / 1220 / 96

The work comprises of supply, installation, testing and commissioning of 11KV / 415V 250 KVA Transformers 2Nos and other associated equipments as per technical specifications, making 16 Nos of earthing arrangements, connecting secondary of transformers to LFSU in kiosk, erecting of security fencing, painting, testing, getting approval from the electrical authority for the installation, commissioning and such other works for completion of 11KV / 415V,-250 KVA Sub-Station as may be necessary.

The height of the transformer center i.e. from transformer H.T. bushing live part to ground level should be maintained at 4.2 mtrs. The earth electrode should be interlinked as per I.S.3043. The work should be carried out as per I.S.1886 read with relevant I.S.details.

Armour of LT cables should be connected to earth through body at both the ends. Cables should be laid in trenches lined with bricks and filled with sand.

The neutral point of transformer should be connected to earth by not less than two separate and distinct connections with its own earth electrode.

The fencing should be connected to earth at two places.

The security fencing should be a rectangle of 5mX11m size with 50mmX50mmX5mm angle iron poles grouted at suitable intervals. Hard drawn steel chain link (50x50x5mm) mesh should be fixed suitably on angle iron with MS flats up to 1.5meter height from the ground. The overhang portion should be in the form of 'Y' towards both directions with barbed wire fixed on it. A gate with suitable locking arrangement is to be provided.

Earthing is to be provided as per detailed in Drg. No. CEW / 1221/2000.

Necessary Test Certificates and measurements required for Inspection are to be submitted by the Tenderer.

Suitable Stay wires if required are to be provided for pole structure to withstand tension.

After completing the installation, the site around the Sub-Station should be dressed & leveled.

Any other work needed for betterment of working of substation.

ANNEXURE 'D'

FINANACIAL BID (SCHEDULE OF WORK)

**SUPPLY, ERECTION, TESTING & COMMISSIONING OF 11KV / 415V, 250 KVA
PLINTH MOUNTED SUB-STATION AT HPT BHUJ, GUJARAT**

Sl. No	Particulars	Qty	Rate	Amount
1	Supply and fixing of two pole structure comprising of 2 Nos. of 'I'-beams (150X80X4.8mm/ 150X75X5mm) 9mtrs length and 5 Nos. of M.S. channels (75X50X5mm/ 75X40X6mm) 3mtr. length complete with PCC foundation in 1:3:6, proportion, Danger board and other fixing material, Clamps, nut bolts, cross arms, base plates painting etc for mounting GOD, LA & DO Fuse as per drawing, I.S. specification. & I.E. Rules.	2 Sets		
2	Supply and fixing of Disc insulator similar to BHEL or equivalent as per Drawing and IS Specification.	9 Nos.		
3	Supply and connecting of ACSR conductor 6/1 x 3.66mm thick from over headlines jumper etc. complete. 11KV	80 Kgs		
4	SITC of outdoor Transformer 11KV/415V-250 KVA) with mounting on suitably sized foundation. Foundation to be provided according to the size of the Transformer and height to meet the condition as mentioned in Annexure- C. The plinth of the Transformer to be provided as PCC 1:2:4 of dimension 1500X1500X2500mm with suitable foundation below ground level.	2 Nos		
5	Supply, Installation, Testing and Commissioning of Gang operated Air Break Switch outdoor type, triple pole, suitable for vertical installation fitting type, single break provided with locking arrangement at both ON & OFF position consisting of MS Channel, HT post double insulator, copper or copper alloy high pressure heavy contract assembly, rod, operating handle & two length of 32mm dia GI pipe conforming to IS1818 1961, 6 Nos. of insulator on each phase, rated voltage 11KV, 200A complete as per specs.	2 Sets		
6	Supply, Installation, Testing, and commissioning of Drop out fuses expulsion type suitable for vertical installation consisting of GI channel base, two insulator per phase complete with fuse carrier bakelite to be with heavily tinned non ferrous metal bar, spring loaded phosphor bronze contacts, complete manufactured as per relevant I.S. Specification with suitable fuse element:-100A rated voltage 11KV complete.	2 Sets		
7	Supply, Installation, Testing and commissioning of Lightning arrester station class, 10KA, 30KV, effectively grounded system as per I.S.3070 part I of 1985. Suitable for 11KV.	6 Nos.		
8	Supply, Installation, Connection, Testing and Commissioning of 600A, 3 phase, 440V, TPN Fuse Switch unit with weather proof enclosure (kiosk-outdoor type, pole mounted single feeder compact unit) including supplying, connection of LT cable from Transformer secondary to input of FSU (size of the cable 400 Sq.mm. 3-1/2 core Al. Conductor armoured 10mtr. length)	2 Sets of FSU		
		20 Mtr. Cable.		

9	Supply and fixing of 5mX11mX2.4m high, security fencing with 50X50X6mm angle Iron poles grounded at suitable interval fixed with hard drawn steel chain-link (50X50X5mm) mesh on angle iron by M.S.flats. The overhang portion should be in the form of 'Y' towards both directions barbed wire fixed on it. It is to be provided as a square around the sub-station with lockable gate, danger boards and painting.	1 Job		
10	Supply and Erection of galvanised stay set of 2- Nos. with 19mm dia X 1.8m stay rod, anchor plate 300X300X6.4mm, thimble, stay clamps, bow, tightener, 15mm dia G.I. stay wire, strain insulator (11KV, at least one in each stay wire) etc. in cement concrete 1:3:6 proportion foundation after excavation and refilling soil as required.	2 Sets		
11	Supply and making of earthing by G.I. plate electrode as per Drw. No. CEW/1221/2000 for Transformer, Lightning arrester, AB Switch, Drop out fuse, fencing etc. The work includes making of pit, supply and providing alternate layers of salt & charcoal and supply & provision of class 'C' pipe for watering, G.I. plate of 600X600X6mm size with G.I. strip fixed on it, G.I. reducer for watering pipe, making connection of by means of G.I. strip 25 X4mm and masonry work with hinged G.I. cover as detailed in the drawing enclosed.	12 Nos.		
12	Supply and making of earthing by copper plate electrode as per Drw. No. CEW/1221/2000 for Transformer Neutral. The work includes making of pit, supply and providing alternate layers of salt & charcoal and supply & provision of class 'C' pipe for watering, copper plate of 600X600X3mm size with copper strip fixed on it, G.I. reducer for watering pipe, making connection of by means of copper strip 25 X4mm and masonry work with hinged G.I. cover as detailed in the drawing enclosed.	4 Nos.		
13	Supply and laying of stone jelly 1ft. high within Sub-Station area.	1 Lot		
	Total			
	Tax if any			
	GRAND TOTAL			

Say Rs. _____

(SIGNATURE OF THE TENDERER WITH SEAL)

MEMORANDUM

I/ WE HEREBY TENDER FOR EXECUTION, FOR THE PRESIDENT OF INDIA, OF THE WORK SPECIFIED IN THE SCHEDULE OF WORK WITHIN THE TIME SPECIFIED FOR THE SUM OF (In words) Rupees _____ (in numerals) ONLY AND IN ACCORDANCE, IN ALL RESPECTS, WITH THE SPECIFICATIONS, DRAWINGS AND INSTRUCTION IN WRITING REFERRED TO IN THE CONDITIONS OF CONTRACT DETAILED IN ANNEXURES OF THE TENDER FORM AND WITH SUCH MATERIALS AS ARE REQUIRED AND SPECIFIED.

SIGNATURE OF THE TENDERER WITH SEAL

ANNEXURE – “E”
TECHNICAL BID

1. A Para by Para compliance statement in the form of the table given below describing DD Specification (Please refer Annexure “E”)for the manufacturers quoted items must be attached with the offer by the Class “A”Electrical Contractor . The compliance statement is to be submitted with the technical bid for all technical as well as general specification for all the Section I to III enumerated in the specification annexed at Annexure “F” This is mandatory & essential requirement . Any offer without compliance statement as detailed above shall be rejected in the first instance without making any reference to the firm.

The compliance statement from the Class “A”Electrical Contractor should be in the following format :-

Para NO & D.D Specification	DD Specs Value & detail	Parametric value of quoted system	Compliance or Deviation	Page No of The bid where this information can be found	Remark
(1)	(2)	(3)	(4)	(5)	(6)

Mere writing on the compliance statement that system complies with the required parameter will not be accepted as compliance. Class “A”Electrical Contractor has to substantiate the same with either technical manual of the equipment. The compliance is to be submitted for complete bill of material including optional items.

2. A detailed ,complete Bill of material shall be attached with the technical offer leaving price column blank. This bill will be exactly same which has been given in financial offer Make ,model and quantity of each item must be mentioned.
3. Documentation : One set of Technical Manual s& datasheets must be supplied with the 250KVA Transformer & Substation. One set must be attached with the offer.

MEMORANDUM

A. GENERAL INSTRUCTION

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 11 KV //415 ,200KVA
SUBSTATION AT DOORDARSHAN KENDRA , BHUJ

B. EARNEST MONEY DEPOSIT : **Rs. 24,000/-**

C. SECURITY DEPOSIT MONEY : 10% OF TENDERED AMOUNT

D. LOCATION : **DOORDARSHAN KENDRA BHUJ**

TIME ALLOWED : 120 days from the date of issue of the order.

Should this tender be accepted, I / We hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract including special conditions annexed herewith to so far as applicable, or in default thereof to forfeit and pay to the President of India or his successors in Office the sum of money mentioned in the said conditions without prejudice to any other right-of the President. The sum of **Rs 24,000/-(RUPEES TWENTY FOUR THOUSAND ONLY)** being the full value of EMD is to be absolutely forfeited to the said President or his successor in office without prejudice to any other rights or remedies of the said President or his successors in Office. Should I / We fail to commence the work specified in the above memo or should I / We do not deposit the full amount of Security Deposit specified in the above memorandum in accordance with the clause of the said conditions of contract, the said sum shall be retained by Government as on account of such security deposit as aforesaid.

The terms and conditions of the agreement have been explained to me / us. I /We clearly understand them.

Dated the _____ date of _____ 2011

Witness :

Address :

Occupation :

SIGNATURE OF THE TENDERER WITH SEAL

ANNEXURE- 'F'

TECHNICAL SPECIFICATIONS FOR 250 KVA TRANSFORMER & SUBSTATION (As per IS:2026(Part-I)-1977 with latest amendments)

SECTION – I

1.1 General:-

250 KVA, 11KV / 415 V, 3-phase, 50 Hz. transformers shall be copper wound suitable for outdoor installation, oil-immersed, naturally cooled, off –load tap changing. Transformer shall be complete in all respect i.e. termination of cable including termination kit on H.T. side lugs on L.T. side shall be provided by supplier. However cable shall be provided by the purchaser.

1.2 Standard:-

The transformer shall generally conform to all provisions of **IS-2026** amended to date :-
(Part-I) 77 with amendments 1 to 3
(Part-II) 77 with amendments 1 & 2
(Part-III) 81 & (Part-III) 77 with amendment 1

1.3 Operational Requirements :-

Transformer shall be capable of continuous operation **24 X 7 Hrs.** Transformers should be designed such that when operated on nominal 11 KV primary voltages, the secondary out put voltage should be 415Volts. For taking care of variation under load conditions from nominal 11 KV primary supply, OFF load tap changing facility should be provided for obtaining 415 V on secondary side.

The transformer shall be free from abnormal hum or vibration. The design shall be such as not to cause any undesirable interference with radio or communication circuits.

1.4 Insulating Oil :-

The insulating oil used in Transformers shall comply with the requirement of IS 335 / 1993 (4th revision) Amended to date (Specification for insulating oil for transformers and switchgears).

1.5 Cooling :-

The transformers shall be oil immersed natural air-cooled type with required radiator fins to dissipate the heat.

1.6 Cable Termination Box :-

The transformers shall be provided with cable endbox on H.V. side suitable for connection to incoming H.T. ,3 core, 90 Sq.mm. armoured Al conductor cable alongwith cable glands of suitable size .bare Bushings on H.V. side suitable for connection to incoming **Overhead line 11 KV .**

On low voltage side, the cable end box shall be provided for suitable connection to 300 sq. mm. Alluminium conductor PVC insulated armoured 3 ½ core L.T. cable along with cable glands of suitable size. bare Indoor heat shrinkable termination kit shall be used for termination of H. T. Cable. Termination box on LT side shall be provided with removable gland plate.

1.7 Accessories & Other Fittings :-

The following minimum accessories /fixtures/attachments and fittings shall be provided as per requirements of design of Transformer:-

a)	Diagram & Rating (marking) plate	:	01 No.
b)	Earthing terminals	:	02 Nos
c)	Lifting Hooks	:	02 Nos.
d)	Directional Rollers	:	04 Nos.
e)	Thermometer Pocket with Thermometer	:	01 No.
f)	Dial type Thermometer min/max indicator	:	01 No
g)	Oil conservator Tank with	:	01 No
	i) Oil level gauge	:	01 No
	ii) Silica gel breather with pipe	:	01 No
h)	Air Release Plug	:	01 No
i)	Explosion vents & pressure relief device with trip contacts.	:	01 No
j)	OFF LOAD tap changing arrangement with Locking	:	01 No
k)	Oil drain valve with plug	:	01 No
l)	Cable box on HV & LV side	:	01 No.
m)	Oil filling nipple with cap	:	01 No
n)	Buchholz Relay with alarm & trip contact	:	01 No
o)	Fitter Valve with plug	:	01 No
t)	Any other item as per OEM	:	As required.

1.8 Earthing :

The transformers has to work in a strong RF field laid by a 20 KW TV & 20 KW FM Broadcast transmitter system. Therefore it is necessary to provide fool-proof Earthing for the chasis.

1.9 Protective Systems & Measures:-

For the protection of transformer Buchholz Relay, the contact of which should close in the event of fault for tripping the incoming Breaker. Oil Temp. Indicator & Explosion Vent shall be provided.

1.10 Painting:-

All steel surfaces shall be thoroughly cleaned by sand blasting or chemical agents, as required, to produce a smooth surface free of scales, grease and rust. The steel surfaces after cleaning shall be given a coat of high quality red oxide or yellow chromate primer followed by final coats.

The internal surfaces in contact with insulating oil shall be painted with heat resistant insulating varnish which shall not react with and not soluble in the insulating liquid used.

The paints shall be carefully selected to withstand tropical heat, rain etc. The paint shall not scale off or crinkle or be removed by abrasion due to normal handling. Where the painting is damaged during transit, installation etc. touch up painting shall be done by tenderer at site.

1.11 Rating Plates:-

Each transformer shall be provided with a rating plate weather proof material, fitted in a visible position, showing the appropriate items as per IS:2026 (part-I) amended to date, the entries on the rating plate shall be legibly marked (by etching, engraving or stamping)

1.12 TESTS :-

General, Routine and Type tests as per mutually accepted procedure based upon IS: 2026 (Part – I) 77 with amended up to date, shall be witnessed at the manufacturer’s works and site by the client:

1.12.1 General Observation:-

Workmanship
Material
Provision of all accessories
Literature and certificates
Misc.

SPECIFICATION NO. XPS-9/2007

1.12.2 Routine Test :-

Measurement of Insulation Resistance
Measurements of Resistance of winding
Oil dielectric strength test.
Out put voltage test
Measurement of No load loss & current, full load Loss & current.
Measurement of Impedance voltage/short circuit impedance
Measurement of efficiency & regulation at various loads.

1.12.3 Functional Test:-

Test on different Tapping Positions
A heat run test (Temperature rise test) will be conducted at works of manufacturer in presence of client, without any charge.
Any other test found necessary as per specs and site conditions.

1.12.3 Type Test:-

Tenderer must process and produce type test certificate for similar capacity/equipment. If type test certificate is not available then tenderer shall have to conduct the following tests at Manufacturer in the presence of indenter at their own expenses:-
Lightning Impulse Test
Dynamic Short Circuit Test.

SECTION – II
TECHNICAL PARAMETERS AND OTHER PARTICULARS TO BE SUPPLIED
BY THE TENDERERS AGAINST DOORDARSHAN REQUIREMENTS AS
GIVEN BELOW.) [SPECIFICATION NO. XPS-9/2007]

*** No column to be left blank.**

S.NO	ITEM	DD SPEFICAITON	* TENDERER'S OFFER
I	II	III	IV
2.	Make Model	To be specified by the tenderer	
2.1	KVA Rating	250 KVA	
2.2	Rated Voltage H.V. winding. L.V. winding.	11 KV+ 10% 415 V, Phase to Phase, 240 V, Phase to neutral.	
2.3	RATED FREQUENCY	50 Hz. ±3%	
2.4	NO. OF PHASES	THREE(3)	
2.5	NATURE OF LOAD	Light, power Air-conditioning & Broadcasting eqpts.	
2.6.	WINDINGS	Two separate copper windings.	
2.7	CONNECTIONS:- H.V. Side L.V. Side	DELTA (11 KV) STAR, 415 V with insulated Neutral.	
2.8.	TAPPINGS (H.V. Side)		
	a) RANGE	± 2 ½ %, ±5% , ± 7 ½ %, ±10 %	
	b) Number of steps	Four	
	c) type of tapings	OFF load tap	
	d) type of operation	Wheel Type or better	
	Mechanical tap position Indicator.	Yes	
	f) Buchhloz relay for tap changeover.	Yes.	
2.9.	TYPE OF COOLING	Natural Oil cooled with radiator fins	
2.10	TYPE OF COOLING MEDIUM	Mineral Oil IS 335	
2.11	TEMPERATURE RISE	50°C for oil, 55°C for winding	
2.12	VECTOR DIAGRAM	Dy – 11 –IS2026(Latest edition)	
2.13	TYPE OF INSULATATION	Class A	
2.14	COMPONENT LOSSES a)No load loss at rated voltage on principal tapping and rated frequency b) Loss at rated full current on principal tapping at 75°C	≤1.45 KW ≤9.0 KW	
2.15	IMPEDANCE VOLT AT RATED CURRENT & FREQUENCY AT 75°C	5.0%	
2.16	REACTANCE AT RATED CURRENT & FREQUENCY.	< 5.0%	
2.17	Insulation level a)Full wave lighting impulse withstands voltage HV winding. b) Rated short duration power frequency withstand voltage	250 KV Peak 28 KVrms.	

2.18	EFFICIENCIES AT 75°C At unity power factor at full load at ¾ full load ½ full load	>98.0% >98.5% ≥99.0%	
2.19	ELECTRIC STRENGTH OF INSULATING OIL(NEW UNFILTERED)MIN.	>30 KV (rms)	
2.20	REGULATION AT FULL- LOAD AT 75°C At unity power factor At 0.8 power factor lagging	≤1.3% ≤4.0%	
2.21	ENVIRONMENTAL CONDITIONS Max. ambient air temp. Relative Humidity Altitude above MSL	45 °C 95 % (non-Condensing) 100 Meter	
2.22	PROTECTION OF TRANSFORMER	Provision of double float Buchholz relay with alarm and trip contacts. Buchholz relay shut of valve. Explosion vent. And pressure relief device with trip contact. Dial type oil temp. Indicator with max. reading pointer and having potential free contacts for alarm and trip. Winding Temperature Indicator with alarm and Trip.	
2.23	TERMINAL ARRANGEMENT H.V. winding L.V. winding	Cable Box Type Cable Box Type	
2.24	APPROXIMATE MASS (IN KG) Core & Windings Tank fittings & accessories Oil quantity in ltrs. Total mass in KG.	To be furnished by tenderer	
2.25	APPROXIMATE OVERALL DIMENSIONS INCLDING ALL FITTINGS(IN METERS) Length x width x height Spacing between wheels.	To be furnished by tenderer	

Note : Any columns left blank may be liable for rejection of Tender.

SECTION – III

S.NO	ITEM	DD SPEFICAITON	* TENDERER'S OFFER
I	II	III	IV
1	<u>ISOLATOR & KIOSK</u> a. Name of the manufacturer b. Rated Voltage c. Rated Insulation Level d. Rated normal Current e. Reference IS f. Dimensional detail of Kiosk	L&T/SIEMENS/CROMPTON 440V 3PHASE 600A	
2	<u>CONSTRUCTIONAL FEATURES</u> a. All parts are hot galvanized and having anti corrosion finish b. Bearing weather proof c. Details of interlocks fitted d. Size of flexible copper connection between rotating shaft and frame for earthing switch. e. Details of secure positions and indicative positions.		
3	<u>G.O.D.</u> a. Manufacturer b. Rating Reference IS	PACTEL/KIRON/ATLAS 11KV,200A IS1818,1961	
4	<u>LIGHTING ARRESTOR</u> a. Manufacturer b. Rating Reference IS	ELPRO 10KVA,30KV	
5	<u>DROPOUT FUSES</u> a. Manufacturer b. Rating Reference IS	PACTEL/KIRON/ATLAS 11KV,100A Relevant IS Specification	
6	<u>DISC INSULATORS</u> a. Manufacturer b. Rating Reference	BHEL/SIL Suitable	

LIST OF MANUFACTURERS

1. TRANSFORMER : INDCOIL / PACTIL / WESTERN / AGRO / CROMPTON
2. FSU : L& T / SIEMENS / CROMPTON
3. CABLE : POLYCAB / CCI / NATIONAL
4. GOD : PACTEL / KIRON / ATLAS
5. DOF : PACTEL / KIRON / ATLAS
6. LA : ELPRO
7. DISC INSULATOR : BHEL / SIL

ANNEXURE- 'G'

INSPECTION PROCEDURE:

ADG (E-WZ)'s authorized representative would inspect all the materials of the sub-station at firms premises / works before delivery at site. This inspection is for testing quality and specifications etc. It is the responsibility of the contractor that only tested materials & equipments as specified in the tender are brought to site. They should also produce test certificate, catalogs etc. for transformer, cable, insulators & kiosk. Final inspection would be carried out at site by Installation Officer.

The following test will be done after installation and before commissioning.

- a) Transformer
 - 1. Insulation Test
 - 2. Oil Insulation Test
 - 3. Transformation Test
 - 4. Any other test as may be necessary

- b) Cables
 - 1. Insulation Test
 - 2. Continuity Test

- c) Measurement of Earth Resistance

TERMINATION OF CONTRACT

In the event of undue delay on the part of contractor for supply, erection and commissioning of the Sub-Stations ADG(E-WZ) has the right to terminate the contract at the cost and risk of the contractor.



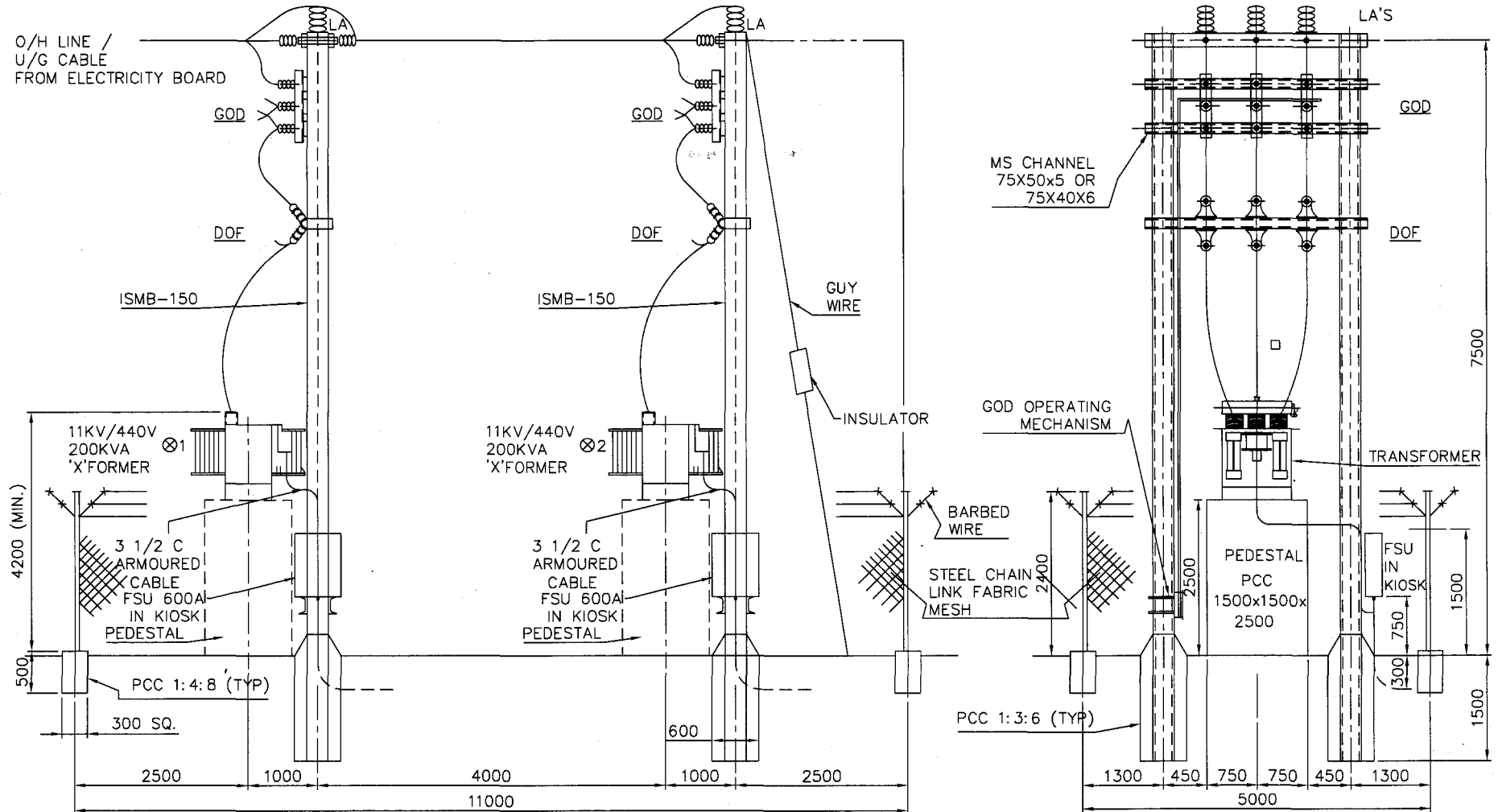
PRASAR BHARATI (BCI)
O/o ADDITIONAL DIRECTOR GENERAL[E-WZ]
ALL INDIA RADIO & DOORDARSHAN
DOORDARSHAN KENDRA COMPLEX
9TH FLOOR, P.B. MARG, WORLI
MUMBAI-400 030.
PRESS TENDER NOTICE



On behalf of President of India, The Additional Director General(E-WZ), All India Radio & Doordarshan, Mumbai-30 invites tenders for the works cited below from reputed contractors who fulfill the qualification criterion prescribed under. The tender documents may be obtained from the Cashier ,office of The Additional Director General (E-WZ),AIR & TV ,101,3rd Floor,Old CGO.Building ,M.K.Road ,Mumbai- between 11.00 Hrs. to 15.00 Hrs. on all working days. The cost of the each Tender document is Rs. 1000/-(Rupees One Thousand only)

1	NAME OF WORK	Supply, Installation, Testing and Commissioning of HT Panel at Doordarshan Kendra, Ahmedabad	Supply, Installation, Testing and Commissioning of L.T. Panel at Doordarshan Kendra ,Bhopal	Supply, Installation, Testing and Commissioning of 11KV/415 V 250KVA Plinth mounted substation at HPT Bhuj
2	ESTIMATED COST	Rs. 12,00,000/-	Rs. 11,00,000/--	Rs. 12,00,000/-
3	EARNEST MONEY DEPOSIT	Rs.24,000/- .	Rs.22,000/	Rs.24,000/-
4	LAST DATE OF ISSUE OF TENDER	30.01.2012	31.01.2012	01.02.2012
5	LAST DATE AND TIME OF RECEIPT OF TENDER	01.02.2012 up to 15.00Hrs	02.02.2012 up to 15.00Hrs	03.02.2012 up to 15.00Hrs
6	DATE AND TIME OF OPENING OF TENDERS	01.02.2012 up to 16.00Hrs	02.02.2012 up to 16.00Hrs	03.02.2012 up to 16.00Hrs
7	QUALIFICATION CRITERION FOR THE WORK	1.Only original equipment manufacturer or their authorized dealer /distributers are eligible 2.Request for tender document will be considered only from those firms who have successfully and satisfactorily completed at least three similar works for Doordarshan or similar organization. 3.The tenderer should be a Class "A" Electrical contractor.	1.Only original equipment manufacturer or their authorized dealer /distributers are eligible 2.Request for tender document will be considered only from those firms who have successfully and satisfactorily completed at least three similar works for Doordarshan or similar organization. 3.The tenderer should be a Class "A" Electrical contractor.	1.Request for tender document will be considered only from those firms who have successfully and satisfactorily completed at least three similar works for Doordarshan or similar organization. 2.The tenderer should be a Class "A" Electrical contractor.
8	CONTACT TEL. Nos.	<u>Tenderers may contact TV Project Section, O/o The Additional Director General (E--WZ), AIR & Doordarshan ,Doordarshan Complex, P.B. Marg, Worli, Mumbai-25. for Clarifications, if any</u> Telephone No: 022-24928773, 022-24985617		

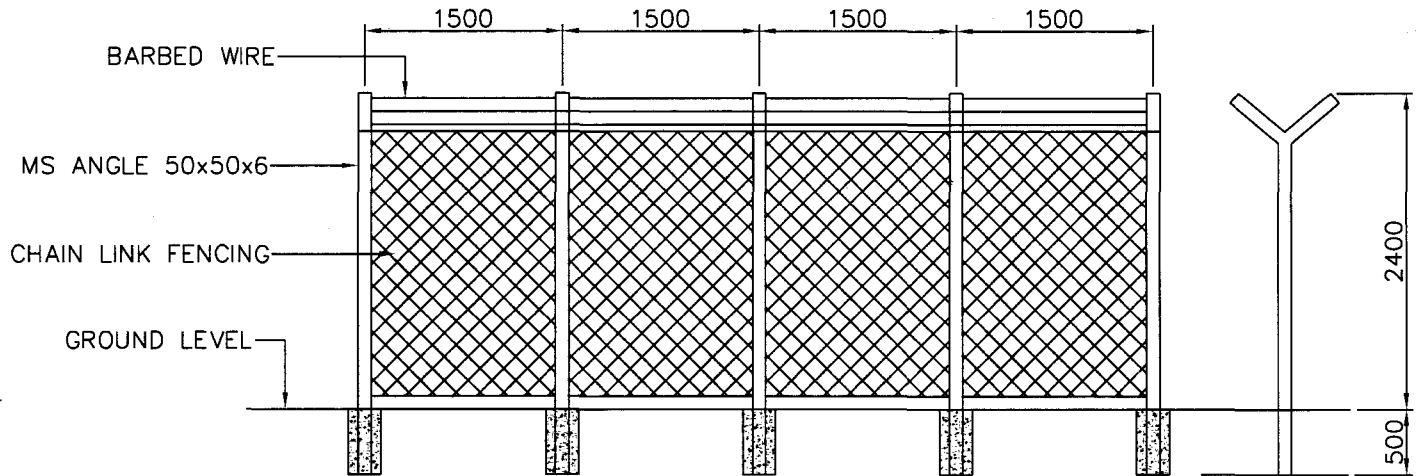
TYPICAL PLINTH MOUNTED SUB - STATION



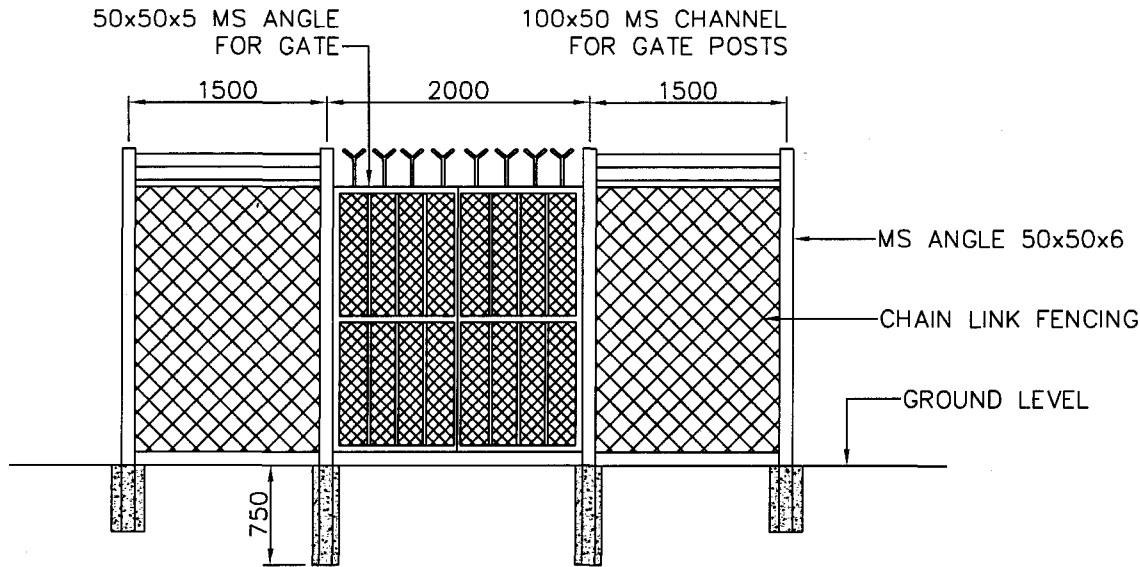
PRASARBHARTI
 (BROADCASTING CORPORATION OF INDIA)
 O/O CHIEF ENGINEER (WZ),
 AIR & DOORDARSHAN, MUMBAI-20.

**TYPICAL PLINTH MOUNTED
 SUB-STATION**

SCALE:- NTS.		DRAWING NO.-
DRN.	A.KORE.09-4-03	CEW-1302/2003
CHD.		
APPD.		



SIDE ELEVATION

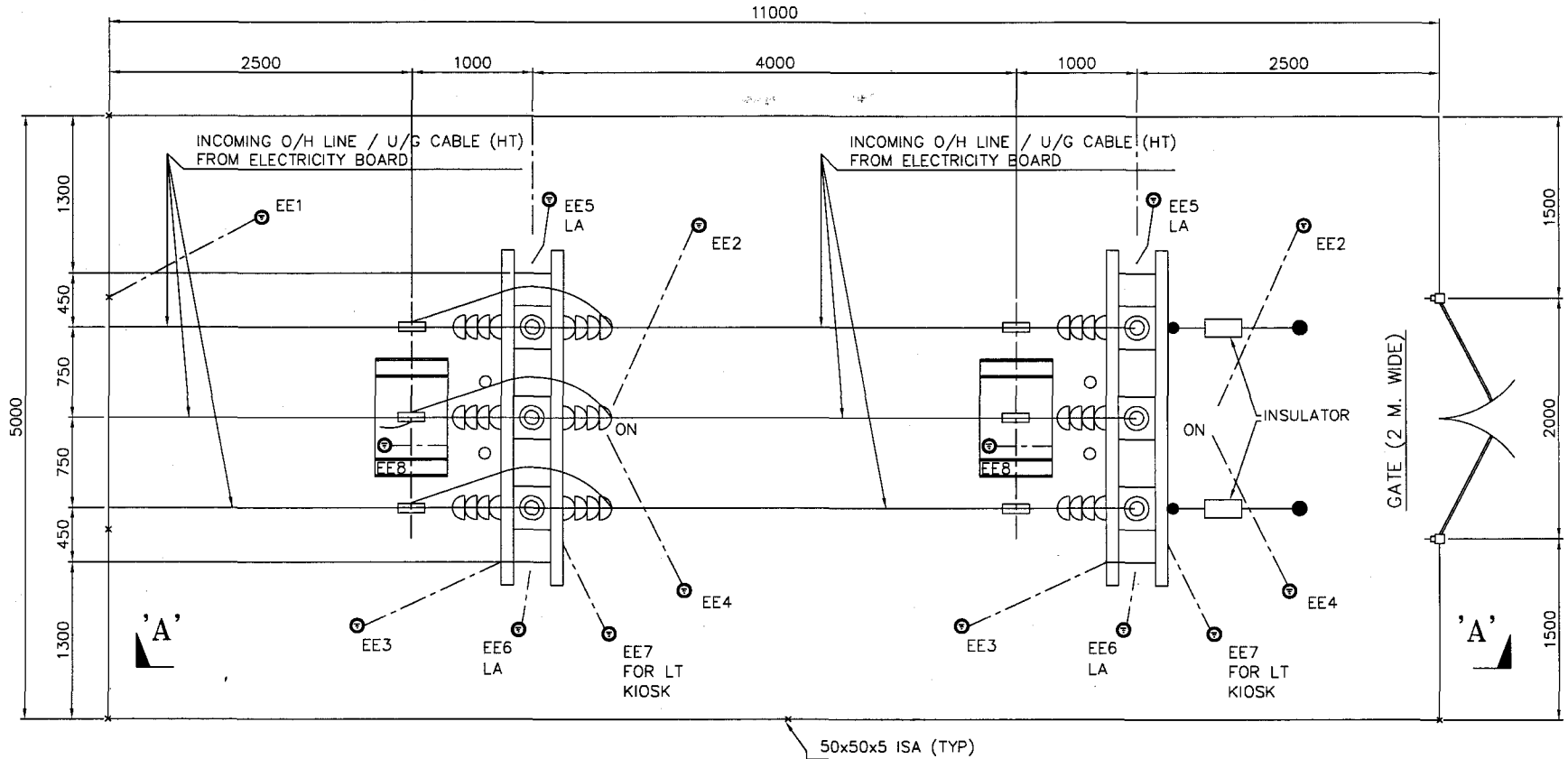


FRONT ELEVATION

PRASARBHARTI (BROADCASTING CORPORATION OF INDIA) O/O CHIEF ENGINEER (WZ), AIR & DOORDARSHAN, MUMBAI-20.		
DETAILS OF SECURITY FENCING & GATE		
SCALE:-	NTS.	DRAWING NO.-
DRN.	A.KORE.11-4-03	CEW-1304/2003
CHD.		
APPD.		

SUB STATION PLAN

(SCALE :- NTS)



NOTES:-

1. EE1,EE3 & EE8 FOR TRANSFORMER BODY STRUCTURE AND FENCING EARTHING.
2. EE5 & EE4 FOR TRANSFORMER NETURAL EARTHING.
3. EE5 & EE6 FOR LIGHTING ARRESTORS.
4. THE DISTANCE BETWEEN ANY TWO EARTH SATION SHALL BE GRATER THAN 3500 MM.
5. REFER DRG.NO. CEW - 1218/2000 FOR SECTIONAL DETAILS (SECT. - "A-A" & "B-B").
6. POSITION OF EE EARTH PITS ARE ONLY SCHEMATIC NOT TO THE SCALE.
7. THIS DRG. IS ONLY SUGGESTIVE TENDER IS REQUIRED TO SUBMIT DETAILED DRG. ALONGWITH TENDER.

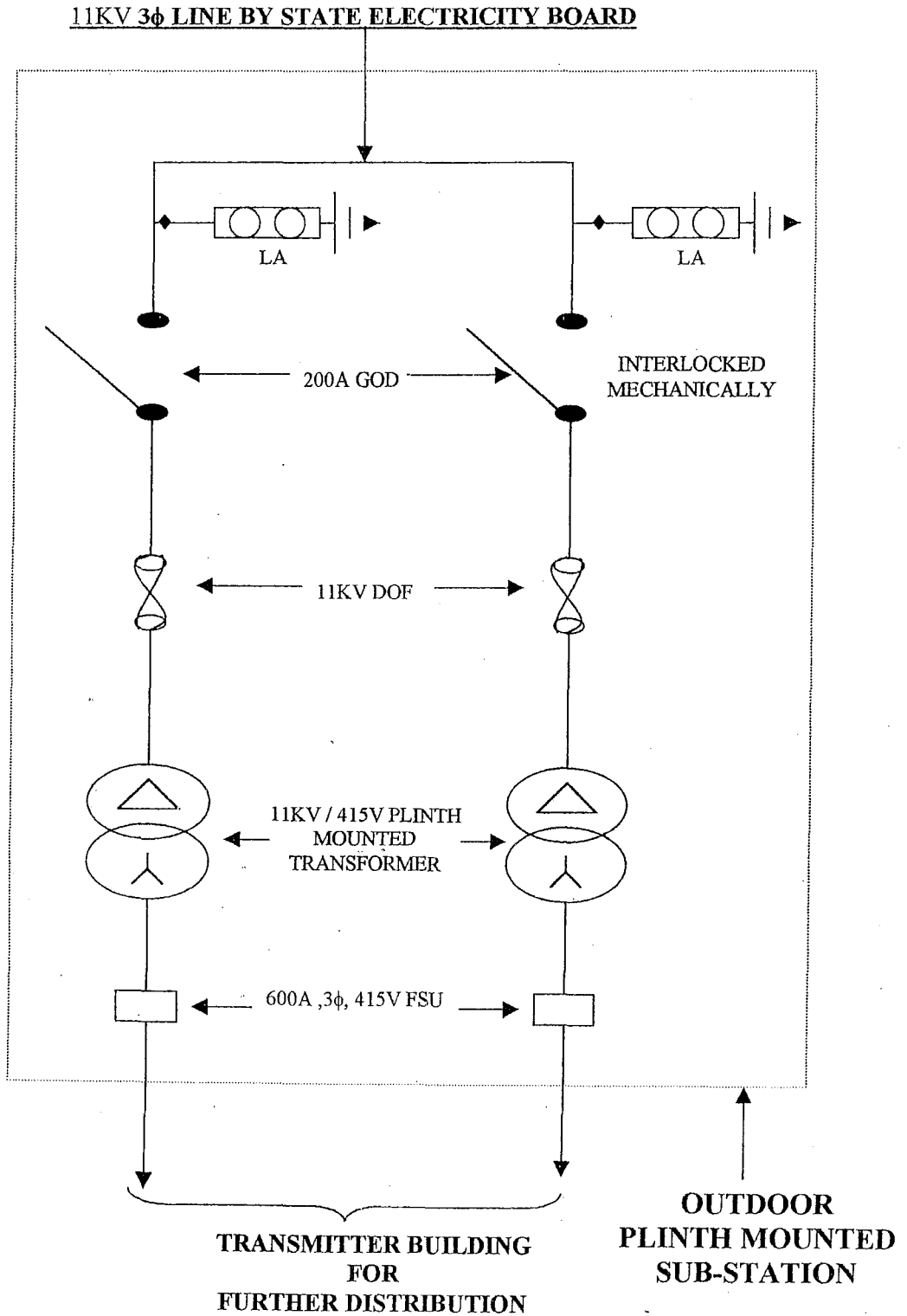
'B'

PRASARBHARTI
(BROADCASTING CORPORATION OF INDIA)
O/O CHIEF ENGINEER (WZ),
AIR & DOORDARSHAN, MUMBAI-20.

SUB STATION PLAN

SCALE: - -		DRAWING NO.-
DRN.	A.KORE. 10-04-03	CEW-1303/2003
CHD.		
APPD.		

TYPICAL PLINTH MOUNTED SUB-STATION
(SCALE:- 1:40)
TYPICAL LINE DIAGRAM 11KV / 415V SUB-STATION.



OFFICE OF THE CHIEF ENGINEER (WZ)
 ALL INDIA RADIO & DOORDARSHAN
 MUMBAI
 DRG. NO:- CEW 1220 /96

DRG. REVISED Dt: 26.2.2002

शीट : 5
 टी.सी. : 5
 भाग नं. 5
 NOT TO SCALE

समूह पाठ : 0.4.1.1(17)
 REF. CLAUSE: 0.4.1.1(11)

प्लेट भू-संयोजन की विधि METHOD OF PLATE EARTHING

