



CENTRAL POLLUTION CONTROL BOARD
(MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)
LUCKNOW-226010

NOTICE INVITING TENDER (NIT)

Central Pollution Control Board, Zonal Office (North), Lucknow invites sealed tenders from eligible bidders for the following work:-

- 01. Name of Work** : Supply, Installation, Commissioning & Testing of Silent DG Sets (Diesel Generator) with water proof acoustic enclosures of capacity 125 KVA
- 02. Cost of Tender Document** : Rs.500/- in form of DD /Pay-Order in favour of Central Pollution Control Board, payable at Lucknow (U.P.)
- 03. Tender selling period** : 21 days from the date of release of advertisement on all working days between 11.00 IST to 17.00 IST.
- 04. Last date of receipt of tender** : 22 days from the date of release of advertisement upto 14.00 IST
- 05. Opening of tender** : 22 days from the date of release of advertisement, 15.00 IST
- 06. Designation, address and contact**
no. of officer inviting Tender : P. K. Mishra, Incharge, CPCB Zonal Office (North), PICUP Bhawan, (Ground Floor), Vibhuti khand, Gomti Nagar, Lucknow- 226010, Phone : 0522-4087701, Fax : 0522-4087602

NB: Procedure for submission of tender, formats / annexure and other detail may kindly be referred in the detailed Tender Notice published on CPCB website www.cpcb.nic.in.

TENDER DOCUMENT

Supply, Installation, Commissioning and Testing of 125KVA Silent DG Set (Diesel Generator) with water proof acoustic enclosure at Central Pollution Control Board (CPCB) Zonal Office, Lucknow



**CENTRAL POLLUTION CONTROL BOARD
ZONAL OFFICE (NORTH)
PICUP Bhawan, Vibhutikhand, Gomtinagar
LUCKNOW-226010**

Central Pollution Control Board
(Ministry of Environment & Forests, Govt. of India)
ZONAL OFFICE (NORTH)
PICUP Bhawan, Vibhuthikhand, Gomtinagar
LUCKNOW-226010

TENDER NOTICE

1. The Incharge, Central Pollution Control Board, Zonal Office (North), Lucknow invites sealed tenders from reputed firms/agencies for the following work:-

Name of Work	: -	Supply, Installation, Commissioning & Testing of Silent DG Sets (Diesel Generator) with water proof acoustic enclosures of capacity 125 KVA
Cost of tender	: -	Rs.500/- non refundable Demand Draft in favour of Central Pollution Control Board, Lucknow
E.M.D Amount	: -	Rs.50,000/-
Last date for sale of tender	: -	17.02.2014 up to 05.00 p.m.
Last date of receipt of tender	: -	18.02.2014 up to 02.00 p.m.
Opening of tender	: -	18.02.2014. at 03.00 p.m.

2. The intending tenderer should fulfill the following requirements:-

- (i) Should be authorized OEA/M (Original Equipment Assembler/Manufacturer) of one or more reputed make of engine and alternators.
- (ii) Should have own manufacturing facility for Genset.
- (iii) Completed three works of not less than Rs.20 Lakh each and each work should involve D.G. Sets of capacity not less than 100 KVA during last five years (list to be enclosed).
- (iv) Should have valid Income Tax Clearance Certificate & Sale Tax Registration Certificate as well as sale Tax Clearance Certificates.
- (v) Should have authorized servicing centre of complete D.G. Set in U.P.
- (vi) Should have valid Type Approval and Conformity of Production Certificates (COP) for emission limits for the engine and for noise limit for D.G. sets as applicable.

The tender document containing technical details and other terms and conditions can be obtained from Administration Section, Central Pollution Control Board, Zonal Office, (North), PICUP Bhawan, Vibhuthikhand, Gomtinagar, Lucknow from 10.00 a.m. to 1.00 p.m. on all working days.

The tender document can also be downloaded from CPCB website www.cpcb.nic.in. In case the tender document is downloaded from the website the bidder shall have to submit the document fee of Rs.500/- as D.D. in favour of Central Pollution Control Board, Lucknow at the time of submitting of the tender, failing which the tender will not be accepted.

(P.K.Mishra)
Incharge
CPCB Zonal Office, Lucknow

Supply, Installation, Commissioning and Testing of 125KVA Silent DG Set (Diesel Generator) with water proof acoustic enclosure at Central Pollution Control Board (CPCB) Zonal Office, Lucknow

1. SCOPE

Central Pollution Control Board, Zonal Office, Lucknow, invites sealed tenders for supply of 125 KVA D.G. Set. The specifications covers manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory works at site, assembly and installation, commissioning, putting into operation and final testing, and other conditions for supply of 125 KVA Silent D.G. Set (Diesel Generator). The Annexure – ‘I’ & ‘II’ give the details of Technical Specifications and work & supply, respectively.

2. LOCATION

The generator set shall be installed at the premises of CPCB Zonal Office, Lucknow situated at Ground Floor, PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow -226010.

3. TYPE OF CONTRACT

The work awarded by this specification shall be treated as an indivisible works contract.

4. MODE OF SUBMISSION OF TENDER

- I. The tender shall be submitted in three separate sealed covers, duly completed in all respects viz. One for “Earnest Money”, the second for “Technical Bid” and the third for “Price Bid”. The name of the work and the words “Earnest Money”, “Technical Bid only” and “Price Bid only”, as the case may be, shall be clearly written on the top of the respective sealed covers. All the three bids, along with the letter for submitting tender (Annexure - IV), shall be put in a sealed cover and the name of the work “Supply of 125KVA Silent D.G. Set with acoustic enclosure to CPCB” shall be clearly written on top of the sealed cover.
- II. The technical bid shall be complete in following:
 - a) Complete tender document as purchased from CPCB or downloaded from CPCB website, should be duly signed (each page) for acceptance of all terms and conditions.
 - b) All the documents as mentioned on page no. 1 from 2 (i) to (vi) of the tender document for fulfilling the eligibility criteria.
 - c) Deviation, if any, from technical specification as per schedule – ‘C’.
 - d) List of recommended spares as per schedule – ‘D’
 - e) Complete technical details as per schedule – ‘E’
 - f) List of tools to be supplied as per schedule – ‘F’
 - g) Address of manufacturer’s premises as per schedule – ‘G’
 - h) Installation programme as per schedule – ‘H’
 - i) Any other information as per schedule – ‘I’
 - j) Preferred makes of equipment as per schedule – ‘J’

- k) The tenderer shall also submit along with his tender, in respect of items wherein make is not specified, a list mentioning the names of the manufacturers of specialised items which he proposes to use in the work, if his tender is accepted.

The tenderer should submit the technical literature in their support.

- III. The price bid as per schedule – ‘A’ with breakup prices as per schedule – ‘B’ and details of duties/taxes etc. shall be submitted in a separate sealed cover.

- IV. Sealed tenders should be addressed to:

The Incharge
Central Pollution Control Board
Zonal Office (North),
PICUP Bhawan,
Vibhuti Khand , Gomti Nagar
Lucknow – 226010.

- V. The tender shall be submitted in sealed envelop on or before 18.02.2014, 02.00 pm in the tender box placed at ground floor of CPCB Zonal Office, Lucknow (near Reception). No tender will be received after 02.00 p.m. on above mentioned date under any circumstances whatsoever. The tenders will be opened on 07.02.2014 at 03:00 p.m.

- VI. a) Any tender, with any of the documents not signed will be rejected.
b) The tender submitted on behalf of a firm shall be signed by all the partners of the firm or by a partner who has the necessary authority on behalf of the firm to enter into the proposed contract otherwise the tender is liable to be rejected.
c) The tender form must be filled in English or Hindi and all the entries must be made by hand and written in ink. If any document is missing, or unsigned, the tender will be considered invalid.
d) All erasures and alterations made while filling the tender must be attested by initials of the tenderer. Overwriting of figures is not permitted; failure to comply with either of these conditions will render the tender void. No advice of any change in rate or conditions after opening of the tender will be entertained.

- VII. Intending tenderers shall pay as earnest money a sum of Rs. 50,000/- (Rs Fifty Thousand only) by bank draft drawn in favour of Central Pollution Control Board, Lucknow. However, the SSI units registered with NSIC and are exempted from depositing Earnest Money. They have to submit a copy of their registration certificate dully renewed up to date with NSIC. A tender which is not accompanied by earnest money or copy of registration certificate with NSIC for exemption of depositing Earnest Money or such other supporting documents ; will not be considered. The earnest money will be returned to the tenderer if his tender is not accepted but without any interest.

5. Technical bids of only those tenderers will be opened, who submitted the earnest money in the prescribed manner.
6. The price bid of only those tenderers will be opened whose technical bids are found to be acceptable.
7. The CPCB does not bind itself to accept the lowest or any tender, and reserves to itself the right to accept or reject any or all the tenders, either in whole or in part without assigning any reason for doing so.

8. PRICES

Prices quoted shall be firm.

9. BREAK UP OF PRICES

In addition to indicating the lump-sum price for the works contract as a whole vide schedule – ‘A’, the tenderer shall also indicate the break up of the lump sum price for the items as per schedule – ‘B’.

10. TAXES AND DUTIES

Central/State sales tax/works contract tax/excise duty etc should be included in the rates tendered. Statutory deduction of tax if applicable at source will be made while releasing payment through running/final bills. A certificate specifying the rate and amount of deduction will however be issued. No form – ‘D’ or road permit will be issued by CPCB. The road permit shall be arranged by the contractor at his own cost.

11. VALIDITY

Tenders shall be valid for acceptance for a period of 90 days from the last date of receiving them.

12. DELIVERY

The DG Set shall be commissioned and handed over within 06 weeks from the date of issue of Letter of Award.

13. TERMS OF PAYMENTS

1. 60% of the total cost of the work, on receipt of materials in good condition at site after inspection by the CPCB’s Officers.
2. 30% of the total cost of the work on Erection, Commissioning and Testing and acceptance thereof by the CPCB.
3. Balance 10% of the total cost of the work will be paid at the end of the warranty/guarantee period described in clauses 42 & 43 will be treated as a security deposit. However if the bidder furnishes Bank Guarantee of 10% valid for two year, the balance 10% shall be released after Commissioning & Testing of the Diesel Genset.

The tenderer must obtain for itself on its own responsibility and at his own expenses, all the information which may be necessary for the purpose of making a tender and for entering into the contract and must examine the site drawings and must consider and inspect the site of the work and acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining thereto and influencing its rates for the work.

14. COMPLETENESS OF TENDER

All fittings, unit assemblies, accessories, hardware, foundation bolts, terminal legs for electrical connection, cable glands and miscellaneous materials or accessories or item of work which are useful and necessary for efficient assembly work of the equipment shall be deemed to be included in the tender within the overall cost quoted. The equipment shall be complete in all details whether such details are mentioned or not.

15. DEVIATION FROM SPECIFICATION

Should the tenderer wish to deviate from the provision in the specification, he should list such deviations in schedule – ‘C’, appended to the specification and submit full particulars and reasons for the deviations. Unless this is done, the equipment shall be considered to comply in every respect with this specification.

17. PERFORMANCE SECURITY

Within 10 days from the date of issue of letter of award, the successful tenderer shall submit a performance security by demand draft in favour of Central Pollution Control Board for an amount equivalent to 5% of the tendered amount. Failure of the successful tenderer to comply with the above requirement i.e. deposition of performance security, the letter of award will be treated as cancelled & the earnest money deposited, will be forfeited. The performance security will be released only after satisfactory completion of work & submission of report thereof.

18. SECURITY DEPOSIT

10% of awarded value will be retained as a security deposit for defect liability for a period of 24 months and shall be released at the end of warranty/guarantee period.

19. AGREEMENT

Within seven days from the date of issue of letter of award from CPCB after acceptance of its tender, the successful tenderer shall be bound to execute the contract by signing in accordance with the draft agreement (Annexure - III) and schedule of conditions. But written acceptance by CPCB of the tender will constitute binding of contract between CPCB and the successful tenderer whether such formal contract is subsequently entered into or not.

20. DATA MANUAL AND DRAWINGS TO BE FURNISHED BY THE TENDERER

With Tender:

The tenderer shall furnish along with the tender, detailed technical literature, pamphlets and performance data to evaluate the offer.

After award of work:

- i) The successful tenderer would be required to submit the following drawings within a week of award of work for approval/consent of the CPCB before commencement of installation work:
 - General arrangement drawing of the equipment with acoustic enclosure, in accordance with the site with complete dimensions.
 - Details of foundations for the equipment and the weight of assembled equipment.
 - Plumbing layout complete with accessories for suction and delivery of water or its circulation.
 - Control layout and schematic drawing.
 - Electrical layout and schematic drawing along with physical arrangement drawings of switch /control board including size and capacity of equipment/cables proposed to be used.
 - Layout of engine exhaust pipe/chimney.
 - Any other drawing necessary for the job.

- ii) The supplier would be required to submit the detailed work programme within a week of award of work for approval/consent of Central Board, before commencement of the installation work.

- iii) The supplier should furnish, within a week of award of work, three copies of detailed instructions and manuals of manufacturers for all items of equipment regarding installation, adjustments, operation and maintenance together with all the relevant data sheets, spare parts catalogue and workshop procedures for repairs, assembly and adjustment etc. all in triplicate.

21. TEST CERTIFICATE

Copies for all documents of routine test certificates of the major equipments like engine, alternator, gensets etc, carried out and copy of type approval certificate obtained for noise norms is also required to be submitted to the CPCB, by the supplier.

22. PRE DELIVERY PERFORMANCE TEST

The supplier will be required to carry out pre delivery performance tests including sound level test as per tender specifications at his own cost as required. The supplier shall also provide all facilities for the Central Board's representative to witness such tests as may be desired by him and furnish advance notice regarding conductance of test.

23. MODE OF DISPATCH OF MATERIAL

Consignments may be sent by road to the site.

24. CONSIGNEES ADDRESS

All materials may be consigned to the following address, freight paid and duly insured at the cost of the supplier.

Address of Consignee:

The Incharge
Central Pollution Control Board
Zonal Office (North),
PICUP Bhawan,
Vibhuti Khand , Gomtinagar
Lucknow – 226010.

25. INSURANCE AND STORAGE

All consignments are to be duly insured up to the destination from warehouse to warehouse at the cost of the supplier. The insurance cover shall be valid till the equipment is Installed, Tested, Commissioned and Handed Over.

26. VERIFICATION OF CORRECTNESS OF EQUIPMENT AT DESTINATION

The supplier shall have to produce all the relevant records to certify that the genuine equipment from the manufacturers has been supplied and erected.

27. The supplier shall not assign or sublet any portion of the work except with written consent of CPCB, failing which CPCB may serve a notice in writing rescinding the contract, whereupon the security deposit shall stand forfeited and at absolute disposal of CPCB.
28. The supplier shall not be entitled to any compensation for any loss suffered by him on account of delay in commencing or executing the work whatsoever the cause of delay may be, including delays arising out of modification of the work entrusted to him or any sub-contracts connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such works or in procuring Govt. controlled or for any other reason, whatsoever and CPCB does not accept liability for any sum besides the tender amount subject only to such variations as may be provided for herein.
29. All compensation or other sums of money payable by the supplier to CPCB, under the terms of this contract, shall be deducted from its earnest money and the security deposit if the amount so permits and the supplier shall, unless such deposit has become otherwise payable, within ten days after such deduction, make good in cash the amount so deducted.
30. The supplier must co-operate with CPCB and its decisions so that the work shall proceed without any delay and to its satisfaction.
31. The supplier shall also submit the wage schedule for all classes of laborers required in the work, for information and necessary action in case CPCB desires to engage its labour for minor works to be done departmentally.

32. SPARES

The supplier shall offer unit prices separately for such spare parts and accessories which he recommends as necessary for 01 year or 600 running hours operation and maintenance vide schedule – ‘D’. The CPCB reserves the right, however, to order any of these spares or increase or decrease the quantity as it may finally decide at the rate given in the tender during the currency of the contract. The value of spares will not be taken into account while evaluating the lowest tender.

33. The tenderer should also mention the AMC chargers for the next 05 years after warranty period.

34. TOOLS

The offer shall also include a set of tools required for operation and maintenance as per schedule – ‘F’, to be supplied free of cost by the supplier.

35. COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS

- a) All works shall be carried out in accordance with relevant regulations, both statutory and covered by this specification. In particular, the equipment and installation shall comply with the following:
- i) Regulations under Factories Act.
 - ii) Regulations under Indian Electricity Act/ Delhi Energy Regulation Act / U.P. State Energy Regulation Act.
 - iii) B.I.S. standards, as applicable.
 - iv) Workman's Compensation Act.
 - v) Environmental Protection Act, 1986 with up to date amendments.

Wherever any foreign standard is, specifically, applicable it shall be indicated by the supplier in the offer itself.

- b) Nothing in this specification shall be construed to relieve the supplier of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulation and safety codes.
- c) Supplier shall arrange for compliance with statutory provisions of safety regulations and safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirements would make the supplier liable for penalty of Rs. 500/- for each default. In addition, the CPCB will be at liberty to make arrangement for the safety requirements at the cost of supplier and recover the cost thereof from him.

36. INDEMNITY

The supplier shall at all times indemnify the Board, consequent on this works contract. The supplier shall be liable for such accident as may be due to any cause, in accordance with the Indian laws and regulations and CPCB shall not be responsible for any accident or damage incurred or claims arising there from during the period of erection,

construction and commissioning under the responsibility of the supplier in so far as the latter is responsible. The supplier shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the supplier.

37. EXTENT OF WORK

- a) The tenderer shall provide the required labour including that for supervision and all materials necessary to make a complete installation and such tests and adjustments and commissioning as may be required by the CPCB. The term complete installation shall not only include major items of the plant and requirements covered by specifications but also all the incidental sundry components necessary for complete execution and satisfactory performance of installation with all labour charges whether or not those have been mentioned in details in the tender document in connection with this contract.
- b) In addition to supply, installation, commissioning and testing of generating set, the following works shall be deemed to be included within the scope of work to be executed by the supplier.
 - (i) Building works necessary for installation of equipment viz. making of platform, opening in walls or in floors and restoring them to their original condition/finish and necessary grouting.
 - (ii) All supports for pipes, conduits and anti vibration pads, etc. as are necessary.
 - (iii) All electrical work required from alternator to control panel, main panel and or emergency panel of CPCB Zonal Office, Lucknow and control wiring including loop earthing. This also includes any alterations required in the existing main and / or emergency panel of CPCB Zonal Office, Lucknow
 - (iv) All pipe connections.

38. FACILITIES AVAILABLE AT SITE

- a) Necessary water and electricity supply for installation as well as for testing and commissioning purpose as may be required for actual work can be made available at site, free of charge.
- b) Suitable size of storage space can also be made available at site free of cost. However watch and ward of the materials shall remain the responsibility of the supplier.

39. ERECTION TOOLS

No tools and tackles either for unloading or shifting the equipment or for erection purposes would be made available by CPCB. The supplier shall make his own arrangement for all these facilities.

40. On completion of the work, the supplier shall clear away and remove from the site all surplus materials, rubbish and temporary works of every kind and leave the whole of site and permanent works clean and in a workman like condition to the satisfaction of CPCB.

41. PERFORMANCE GUARANTEE

The supplier shall guarantee among other things the following:

- a) Quality, strength and performance of the materials used.
- b) Safe mechanical and electrical stresses on all parts under all specified conditions of operation.
- c) Satisfactory operation during the maintenance period.
- d) Performance figures and other particulars as specified by the supplier in schedule of guaranteed technical particulars in schedule – 'E'.

42. WARRANTY

All equipment supplied and installed shall be covered by warranty for a minimum of two year against defective workmanship and material. If at any time any equipment is found to be defective due to faulty materials, faulty design or inferior quality of materials it shall be repaired or replaced at site free of charge by the supplier at his own cost during the warranty period and even after the warranty period against reasonable charges. The warranty shall cover consequential damages to the equipment supplied and installed by the tenderer due to poor workmanship or defective materials. All repairs shall be done promptly within a reasonable period. The warranty period shall commence from the date of handing over to CPCB.

In case the supplier fails to repair faulty work or replace the faulty item, as the case may be, within a reasonable time as decided by the Incharge, CPCB Zonal Office, Lucknow, (which shall be final), he shall be liable to pay compensation at the rate of one percent on the total amount put to tender for every day not exceeding ten days while his failure to do so shall continue. And in case of any such failure the Incharge, CPCB Zonal Office, Lucknow, may rectify or remove and re-execute the work and replace with other, the materials or articles complained of as the case may be at the risk and expense, in all respects, of the supplier.

The supplier will be required to furnish such facilities as will be necessary for inspection of the equipment before dispatch at his or his associate works if so required by the CPCB. The supplier shall furnish information vide schedule 'G' for the purpose and will also give sufficient notice regarding the date proposed for such tests to the CPCB so as to facilitate presence of its representative. The security deposit shall be refunded after successful completion of warranty/ guarantee period.

Any design defect observed at any period even after the warranty period is over, the defective part shall be replaced by the manufacturer at free of cost.

- 43.** The supplier has to undertake/attend any complaint within 24 hours and shall render satisfactory service for minimum 24 (twenty four) months for which the contract shall remain in force.
- 44.** If the headquarter of the supplier are elsewhere than U.P. , he shall have a duly authorised agent in U.P. for the entire period of service contract. Such agent shall be authorised to act on behalf of the supplier to accept notice of service of contract and to agree to extras, omissions and varied item of work and rates for the same. Such agent shall maintain on

his staff, a qualified engineer and such office personnel as may be required for the efficient execution of works. Any notice under the contract shall be deemed to have been served to the supplier if served upon such agent or sent by registered letter to his address. Such agent shall not be changed and shall not leave during the duration of the contract, unless the consent of CPCB has been previously obtained. If CPCB shall order the supplier to carry out any rectification under the terms of the contract after the work is completed, the supplier shall have the same or another duly authorised agent while such rectifications are being carried out.

45. COMPENSATION FOR DELAY

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the supplier. The supplier shall pay as compensation an amount equal to one percent or such small amount as the Incharge, CPCB Zonal Office, Lucknow (whose decision in writing shall be final) may decide, on the total cost of the work, as shown in the tender, for every day that the work remains unfinished after the prescribed dates. Provided that the entire amount of compensation to be paid under the provisions of this clause, shall not exceed ten percent on the total cost of the work as shown in the tender.

46. EXTENSION OF TIME

If the contractor shall desire an extension of time for completion of the work on the grounds of his having been unavoidably hindered in its execution or on any other ground he shall apply in writing to the Incharge, CPCB Zonal Office, Lucknow, within a week of the date of hindrance on account of which he desires such extension as aforesaid, and the Incharge, CPCB Zonal Office, Lucknow, shall if in his opinion (which shall be final) reasonable grounds be shown, therefore, authorise such extension of time if any as may in his opinion, be necessary or proper.

47. SETTLEMENT OF DISPUTE AND ARBITRATION

- i) All disputes and differences arising out of or in connection with the contract and the works (whether during the progress of the works or after their completion), determination, abandonment or breach of the contract shall be referred to a team of one men arbitrator appointed by the Chairman, Central Pollution Control Board. In case of conflicting findings by the arbitrator, the decision of the arbitrator shall be final and binding. It will not be an objection to any such appointment that the arbitrator is the Government servants and had any interest in the Board or the contract entered into directly or indirectly. In all cases, the arbitrator shall state their decision in writing and if amount of claims in dispute is Rs 50,000/- and above, the arbitrator shall give reasons for award. Subject as aforesaid the provisions of the Arbitration Act, 1940, or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.
- ii) It is a term of the contract that the party involving the arbitration shall specify the dispute or disputes to be referred to the arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.

- iii) It is also a term of the contract that if the supplier does not make any demand for arbitration in respect of any claim in writing within 90 days of receiving the intimation from the CPCB that final bill is ready for payment, the claim of the supplier will be deemed to have been waived and absolutely barred and the CPCB will be discharged and released of all liabilities under the contract in respect of these claims.

- iv) The decision of CPCB regarding the quantum of reduction as well as justification thereof in respect of rates for sub-standard work, decided will be final and would not be open to arbitration. Provided always that no compensation shall be payable for any loss in consequence of hostilities or war-like operation (a) unless the supplier had taken all such precautions against Air raid as are deemed necessary By A.R.P. officers of the Engineer-in charge, (b) for any materials etc., not on the site of work or for any tools and plant, machinery, scaffolding, temporary building and other things not intended for the work.

- v) In the event of the supplier having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as considered reasonable by CPCB. Compliance within such time as CPCB may prescribe in that behalf and in the event of the supplier failing to effect such compliance within the time prescribed by CPCB then CPCB shall without prejudice to his other rights be entitled to withhold from the amount payable to the contractor any amount payable to the workmen under any such laws, regulations or rules and to make payment thereof to the workmen. The CPCB shall also have in that event the right to terminate the contract with immediate effect and to exercise powers reserved to their employer under the contract as a result of termination.

SUPPLY AND INSTALLATION OF 125KVA DG SET TO CPCB ZO, LUCKNOW

TECHNICAL SPECIFICATIONS

1. DIESEL ENGINE

An engine of reputed make, suitable for 125KVA GENSET, Water Cooled, cold starting, compression ignition, 4 Strokes, high speed Diesel Engine developing suitable 156 BHP at 1500 RPM under NTP Conditions to IS 10002,BS 5514, DIN 6271, IS 3046 as appropriate with 10% Over load for 1 hour in each 12 Hours. The engine should be able to take 100 % load without deration upto 50⁰C ambient temperature

2. COOLING SYSTEM

- Heavy duty radiator with fan
- Cooling water centrifugal pump
- Coolant Inhibitor

3. EXHAUST SYSTEM

- Exhaust Silencer

4. FUEL SYSTEM

- Fuel filters
- Fuel lift pump
- Fuel oil Filter

5. LUBE OIL SYSTEM

- Lube oil cooler
- Lube oil filters
- Centrifugal by pass filters

6. INTAKE AIR SYSTEM

- Dry type Air cleaner

7. GOVERNER

- Electronic Governor/Mechanical Governor
- Electronic control panel with digital metering

8. STARTING SYSTEM

- Electric starter - 12 volts DC
- Battery charging alternator
- Hour Meter

9. COUPLING ARRANGEMENT

- Flywheel to suit single bearing alternator
- Flywheel housing (SAE housing)
- Inbuilt AVM pads to reduce vibrations and eliminate misalignment of engine and alternator.

10. SAFETY CONTROLS / ENGINE INSTRUMENT PANEL (ENGINE MOUNTED)

- Starting switch with OFF/ON/START KEY
- Water temperature display
- Lube oil pressure display
- RPM display
- Tachometer with hour meter

11. ALTERNATOR

Synchronous brushless, single bearing alternator, rated at 125KVA/100KW, suitable for continuous operation at 1500 rpm generating 415 volts at 0.8 power factor (lag) suitable for 50 Hz, 3 phase, 4 wire system.

12. VIBRATION INSULATION

Specially designed poly bond anti-vibration mounts for vibration insulation should be used between engine/alternator and base frame.

13. FUEL TANK

Base fuel tank of sheet metal (14 SWG), having a capacity of ≥ 100 litres, duly fabricated and painted, complete with drain valve, air vent, level indicator, inlet and outlet connection, locking arrangement to avoid theft of oil, and housed in the base frame.

14. BATTERY

One number battery or as required for starting of 12 volts, 150 AH of reputed make, preferably Exide, Okaya, Luminous, provided inside the enclosure.

15. AMF CONTROL PANEL

The panel shall be equipped as follows:

Power Circuit

Metering

- One voltmeter with selector switch
- One ammeter with selector switch
- One frequency meter
- Fuel level gauge

Set of push buttons, selector switches and indicating lamps

- Push button for engine start
- Push button for engine stop
- Indicating lamps for "Load On" and "Set Running"
- Master selector switch for auto/manual/test/off
- Push buttons for test, reset and acknowledge
- Indicating lamp for "Set fails to start".

16.EMISSION

The diesel engine shall comply with the emission limits given in G.S.R. 371, dated 17.05.02 and G.S.R. 520, dated 1.7.2003 (irrespective of the date of implementation given in the notification) and certified as per emission norms of GOI already notified.

15.ACOUSTIC ENCLOSURE

- Acoustic enclosure should be integral part of the Genset.
- A provision for emergency shut-down from outside the container should be made
- Control panel should be mounted outside the enclosure.
- Engine should carry warranty of respective manufacturer for diesel generating set in enclosure
- The acoustic enclosure shall be rain/water proof.
- Preferably the enclosure shall be modular construction with the provision to assemble and dismantle as per site conditions
- The enclosure should be fabricated out of CRCA sheet of 14 SWG
- The sheet metal components should be dip seven tank pretreated
- To have long life of the enclosure it should be P.P. based powder coated (inside as well outside). All nut and bolts hardware's be Zinc coated or Stainless Steel.
- Fuel tank at the base of the DG set should have minimum capacity of 200 litres. It should be provided with breather, drain plug, fuel gauge meters to indicate fuel level and locking arrangement to avoid theft of oil.
- There should be provision for filling the fuel from outside
- Battery should be accommodated in a separate tray in the enclosure

- There should be provision for drain plugs for draining Mobil oil/diesel from outside the enclosure.
- The doors to be provided with high quality EPDM gaskets to avoid leakage of sound
- The lockable type door handles should be provided.
- A provision for emergency shutdown from outside the container should be made

The D.G. Set should comply with the noise limit of 75 db(A) at 01m from the enclosure surface and other requirements given in and as per the document "System & Procedure for Compliance with Noise Limits for Diesel Generator Sets (upto 1000 KVA)" issued by CPCB.

16. FUEL CONSUMPTION

Engine should be capable of providing fuel consumption of ≥ 4 units/lit. of diesel, between 80 to 100% load as per BS 5514.

17. MANUALS

- Engine operation and maintenance manual
- Alternator manual with Parts catalogue
- Engine maintenance schedule
- Warranty card
- Engine routine test certificate

18. INSTALLATION

- a. The base of the Genset shall be minimum 30cm from the ground level so that the oil/fuel can be drained out easily.
- b. The ground up to 01m around the Genset shall be made of cement concrete platform of mix 1:2:4 (1 Cement, 2 Coarse Sand, 4 Stone Chips 20mm).

ANNEXURE -II

SCHEDULE OF WORK AND SUPPLY

S.No.	DESCRIPTION	Qty.
1.0	Supply of 125KVA DG set with acoustic enclosure as per enclosed technical specification	One
2.0	AMF Control Panel	One
3.0	Transportation, unloading and placement of DG set to site	One job
4.0	Preparation of concrete slab with load bearing capacity sufficient to take dead load of DG set	One job
5.0	Earthing system 600x600 mm G.I. plate, G.I. strip 50mm x 6mm, 50mm dia. G.I. pipe including fittings, Charcoal and Salt, Hodi Cover	Four nos.
6.0	G.I. Strip: 50mm x 6mm	As per site (app. 60mtrs)
7.0	Cabling system 3.5 Core Al. Armored cable 300 sq. mm	As per site (app. 300mtrs)
8.0	End termination of 3.5 Core Al. Armored cable 400 sq. mm with Gland and thimbles	As per site
9.0	Control cable 2.5 Sq. mm 12 core	As per site (app. 25mtrs)
10.0	Connection with Main / Emergency Distribution Panels along with modifications in the Main / Emergency Panel at CPCB Zonal Office, Lucknow	As per site
11.0	Exhaust system: Provision of M.S. pipe of suitable diameter {class B pipe} to height 5mtr above rooftop of PICUP Bhawan, Lucknow (total appx 30mtr from the ground level). The size of the pipe should be such that there is no back pressure beyond allowable limits. Suitable M.S. flange, nuts & bolts with support brackets & structure, AI. Cladding on thermal insulation to, be provided	As per site As per site
12.0	Fuel system: Min. 100litres fuel tank at the base of DG set by 19mm M.S. pipe (C class) with fuel fittings NRV etc. with effective locking arrangement	One job
13.0	Semi Rotary Diesel Pump	One
14.0	Clearance from various department	One job
15.0	Testing & Commissioning	One job

AGREEMENT

An agreement is made at _____ on the day of _____ between the Central Pollution Control Board, Zonal Office (North), PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow-10(hereinafter referred to as the 'Board which expression shall unless repugnant to the context or meaning thereof, be deemed to include their successor and / or assignee) of the one part and M/s _____ (hereinafter referred to as the contractor, which expression shall unless repugnant to the context or meaning thereof, be deemed to include their successors and/or assignee) of the other part.

WHEREAS the party of the first part is a statutory body, created and established under an act of the Parliament known as Water (prevention & Control of Pollution) Act, 1974, and the rules framed thereafter, the Incharge, CPCB Zonal Office, Lucknow, is the authorised person to sign the Agreement on behalf of the Central Board.

WHEREAS the Board is desirous of the work 'supply, installation, commissioning & Testing of a 125KVA DG set with acoustic enclosure' at Central Pollution Control Board, Zonal Office (North), PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow-10, as per the specification, conditions and rates attached to this Agreement

WHEREAS the party of the second part is a manufacturer/supplier of Diesel Generator set having its registered office at _____.

WHEREAS the contractor has approached the Board for the execution of the said work and has agreed to conduct and complete the work on the term; and conditions hereinafter.

WHEREAS the contractor has deposited Rs. _____ (Rupees _____) with the Board for the performance of the agreement.

AND NOW THEREFORE in consideration of the terms and mutual convenience hereinafter mentioned the parties hereby agree as follows:

I. DEFINITIONS

- 1) 'Agreement' means this agreement and all appendices, annexure attached, work orders, specification and instructions issued in writing at the time of issuing the work order, and subsequent amendments, modifications and additions directed by the Board to be carried out, provided that such amendments, modifications and additions are incidental to the work at the point of time when such directions are given by the Board.
- 2) 'Work' means the total work to be conducted and completed by the contractor as specified in detail in the work order.
- 3) The 'Board' means the Central Pollution Control Board including its Member Secretary and any other official authorised to act and on behalf of the Board by the Member Secretary.

4) The 'Contractor' means _____

II. OBLIGATIONS OF BOTH THE PARTIES

- 1) The contractor shall carry out and complete the work in Six weeks from the issue of the supply order, as detailed in it and as entrusted to him under the instructions of the Board, and the contractor further undertakes to give full co-operation to the Board in this regard.
- 2) The Board shall render all suitable assistance to the contractor for the purpose of obtaining permissions/approvals etc., from the various departments as may be required under various acts, rules, regulations and/or notifications.
- 3) The contractor shall receive payment in the manner prescribed in the mode of payment. Payment for any additional work, not included in the work order and which shall have to be carried out by the contractor under this agreement due to amendments, modifications or additions as per clause I (1) of this agreement, will be decided amicably considering the market rate and will be paid accordingly.
- 4) This agreement comprises of detailed and definite enumeration of the rights and duties of the parties to the contract and covers all previous correspondence or negotiations etc.
- 5) If one provision of this agreement should prove to be invalid or null, all remaining provisions shall remain effective without change. The contracting parties shall try to replace the invalid and null provision by an admissible provision aiming of the same economic and legal rights.
- 6) Dimensions/ standards and units wherever referred shall conform to the Indian Regulations wherever obligatory and in all other cases the same will be as per prevailing practice. If, however, the Board specifies the dimensions and units of the work then same shall be final and the contractor undertakes to adopt the same and to carry out the work in accordance with the instructions issued by the Board.
- 7) The contractor -shall not engage or employ any subcontractor for the execution of the work under this Agreement without the prior consent in writing obtained from the Board. Any possible sub-contracts, which may be concluded by the contractor, shall be so concluded on the sole and full responsibility *of* the contractor. The fact of sub-contracting shall not absolve the contractor from his obligations and responsibilities under this Agreement.
- 8) Subject to the provisions of this Agreement the contractor shall not transfer or assign this Agreement without the Board's prior consent in writing. In any case transfer of assignment which may be affected by the contractor shall not modify his liabilities under this Agreement. In the event of transfer of assignment, the assignees or transferee shall be responsible for the fulfillment of the conditions of this Agreement.

III. EXTENSION AND TERMINATION

It is agreed between the parties that the Board may grant extension of time to the contractor for the completion of the work under this contract provided the Board is satisfied with the reasons for extension stated by the contractor in his application in writing made to the Board, that such extension would not entitle the contractor for any additional payment.

IV. INDEMNITY

- 1) The contractor hereby undertakes to indemnify the Board against any claim made by any person/persons or by a third party for any reason whatsoever such a claim or damage may arise because of a mistake, negligence and/or any other reason or an act of the contractor during the course of the work being carried out by the contractor under this contract.
- 2) The parties to this Agreement specifically agree that the Board shall have the right to withhold the payment of fees that may be due and payable to the contractor in the event of any breach committed by the contractor under this Agreement and the payment withheld be paid whenever such breach is rectified.

V. ARBITRATION CLAUSE

The parties to the Agreement hereby agree and consent that all disputes, claims etc., arising out of and touching upon clause of the Agreement and their interpretation shall be submitted to a team of one men arbitrator to be appointed by the Chairman, CPCB.

IN WITNESS WHEREOF the parties of the first and second part of this Agreement have subscribed their signatures on this Agreement on the day and year herein above mentioned.

SIGNED IN THE PRESENCE OF:

1. For and on behalf of the party of the first part:

Witness:

2. For and on behalf of the party of the second part:

Witness:

ANNEXURE- IV

LETTER SUBMITTING TENDER

To

Dear Sir,

With reference to tender invited by you for _____
_____ at Central Pollution Control Board, Zonal Office (North),
PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow-10, I/We do hereby offer to execute
the works under "Contract at quoted rates". I/We have seen the site, read the articles of
agreement, conditions of contract, and specifications. I/We agree to finish the whole work
within _____ weeks as specified in the tender.

I/We have deposited as earnest money Rs. _____ (Rupees _____
_____ only) by a bank draft in favour of you which is not to bear any interest.
I/We do hereby agree that this sum shall be forfeited by you in the event our tender is
accepted, and I/We fail to complete the contract within the said period.

I/We understand that you are not bound to accept the lowest or any tender that you receive.

Yours faithfully

(_____)
Name of Partners of the firm

Name of the Bankers:

Tenders submitted in _____ before _____ p.m.

SCHEDULE – ‘A’

TOTAL PRICE OF THE WORK

Supply, Installation, Commissioning and Testing of a 125KVA Genset at Central Pollution Control Board, Zonal Office (North), PICUP Bhawan, Vibhuti Khand, Gomtinagar, Lucknow-10

for Rs. _____ (Rupees _____
_____)

(This shall include all work as per specifications and other wise, necessary for the completion of the work)

(The prices should include Taxes/Duties etc.)

Signature of the tenderer

Date:
Place:

SECHDULE – B

BREAK UP OF PRICE

S.No.	Details of item	Unit	Qty.	Rate / unit (Rs.)	Amount. (Rs.)	Remarks
1.	Engine with mounted accessories	Each				
2.	Alternator	Each				
3.	Control Panel	Each				
4.	Radiator assembly with motor	Each				
5.	Batteries	Set				
6.	Acoustic enclosure with base frame	Each				
7.	Daily Service Tank/Base tank	Each				
8.	Hospital grade muffler	Each				
9.	Thermal insulation and al. cladding exhaust muffler and piping	Mt.				
10.	Earthing system	Each				
11.	Lubricating oil piping (Specific sizes & quantity)	Mt.				
12.	Fuel Oil piping (Specific sizes & quantity)	Mt.				
13.	Exhaust Piping (Specific details & quantity)	Mt.				
14.	Flexible piping connections (Specific details & quantity)	Mt.				
15.	Control Cable (Specific sizes & quantity)	Mt.				
16.	Power Cables (Specific sizes & quantity)	Mt.				
17.	Building materials	Lot				
18.	Miscellaneous Accessories	Lot				
19.	Installation , Testing & Commissioning	Job				
20.	Fuel pump	Each				
21.	Any other terms or details					

Taxes, Duties etc:

Note: Details of quantities and adjustment rates to be indicated wherever applicable

Date:

Signature of the tenderer

SCHEDULE-C

DEVIATION FROM TECHNICAL SPECIFICATION

S.No.	Reference to clause of specification	Deviation	Reasons for deviation
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Certified that barring the deviation listed above our equipment complies fully with the specification.

Date:

Signature of the tenderer

SCHEDULE -D

LIST OF RECOMMENDED SPARES AND THEIR PRICES

S.No.	Part No.	Detail Description	Qty. recommended	Unit.	Rate	Remarks
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Date:

Signature of the tenderer

SCHEDULE-E

SCHEDULE OF GUARANTEED TECHNICAL PARTICULARS

S.No.	Details of Particulars	Guaranteed date	Remarks
I	Engine		
	1. Make		
	2. Type		
	3. No. Of cylinders		
	4. Arrangement of cylinders		
	5. Bore and stroke		
	6. R.P.M.		
	7. Method of starting		
	8. Compression pressure		
	9. Compression ratio		
	10. Max. cylinder pressure		
	11. Piston speed		
	12. Fuel injection type		
	13. Aspiration method		
	14. Fuel injection pressure		
	15. Lubricating oil system		
	16. Lubricating oil pressure		
	17. Fly wheel		
	i) Diameter		
	ii) Weight		
	iii) Is it balanced dynamically		
	18. Cyclic variation		
	19. Time required for starting		
	20. Type of governor		
	21. Guarantee performance of governor		
	a) Permanent variations with		
	i) Full load thrown off		
	ii) Full load thrown 'on'		
	b) Temporary variations with		
	i) Full load thrown off		
	ii) Full load thrown 'on'		
	22. Head speed regulation limits		
	23. Fuel oil recommended		
	24. Lubrication oil recommended		
	25. BHP at site at output shaft/coupling		
	26. Overload capability		
	i) Full load		
	ii) Half load		
	27. Mechanical efficiency		
	28. Standard mounting accessories on engine		

29. Safety shutdown provision
30. Direction of rotation
31. 2 stroke or 4 stroke
32. Type of cooling at sump capacity
33. Oil
34. Any other data

II. Alternator

1. Make
2. Type
3. Governing specification
4. Full load output in KVA
5. Full load output in KW at 0.8
6. Enclosures
7. Speed/frequency
8. No. of phases
9. Is neutral brought out
10. Voltage between phase/neutral
11. Regulated band of voltage
12. Current carrying capacity of windings
13. Percentage imbalance permissible
 - i) Full load
 - ii) Other loads
14. Sanctioned over capacity at maximum Ambient Temp,
15. Short time overload
16. Efficiency
17. Temporary over load after full load run for 12 months
18. Insulation starter
19. Insulation of rotor
20. Excitation method
21. Excitation amps at full load
22. Excitation voltage
23. Air gap between starter & rotor
24. Exciter Type
25. Specification for exciter

III. General

1. Length of set over all x width overall
2. Weight of set overall
3. Head room needed for lifting/servicing
4. Weight of alternator
5. Weight of engine
6. Weight of heaviest part handled
7. Direction of rotation
8. Standard accessories
9. Radiator make & type
10. Fan diameter
11. C.F .M. of fan static pressure
12. R.P.M. of fan/type of drive

13. HP absorbed by ran
14. HP of motor drive in the case of independent motor and its specification
15. Details of other major unit assembled on set
16. Capacity of daily service tank
17. Size of service tank

IV Control panel

1. Make
2. Type
3. Overall dimensions (L x B x H)
4. Finish
5. Sheet metal size
6. Make and type of contactors/circuit breakers
7. Make and type of instruments
8. Make and type of switch fuse units
9. Other facilities incorporated

V Any other data the tenderer may like to furnish

SCHEDULE-F

LIST OF TOOLS TO BE SUPPLIED

S.No.	Details of Tools	Qty.	Remarks
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Date:

Signature of the Tenderer

SCHEDULE-G

ADDRESS OF MANUFACTURER'S PREMISES FOR THE PURPOSE OF INSPECTION

S.No.	Details of items	Makers Name	Place where equipment can be offered for routine type test & initial inspection	Name, Phone No. and Address of the person to be contacted for the purpose of inspection
1.	Engine			
2.	Alternator			
3.	Control panel			
4.	Radiator assembly			
5.	Acoustic enclosure with base frame			
6.	Daily service tank			
7.	Batteries			
8.	Piping (Rigid) Fuel Lubricating oil Exhaust			
9.	Piping (flexible)			
10.	Cables			
11.	Earthing materials			
12.	Tools			
13.	Spares			
14.	Fuel injection pump/system			
15.	Turbo- charger			
16.	Inter cooler			
17.	Alternator for batteries			
18.	Engine start system			
19.	An other items			

Date:

Signature of the Tenderer

SCHEDULE-H

SCHEDULE OF INSTALLATION PROGRAMME

S.No.	Details of items	Week 1,2,3,4,5,6
A.	SUPPLY OF DRAWINGS & DETAIL WORK PROGRAMME FOR APPROVAL	
B.	TESTS OR INSPECTION AT MANUFACTURERS Works/place of inspection.	
	i) Engine	
	ii) Alternator	
	iii) Radiator assembly	
	iv) Central panel	
	v) Batteries	
	vi) Acoustic enclosure with base frame	
	vii) Daily service tank	
	viii) Piping	
	ix) Cables	
	x) Earthing system materials	
	xi) Tools	
	xii) Spare	
	xiii) Rest of items	
	xiv) Noise limit compliance test	
	xv) Emission limit compliance test	
C.	BRINGING MATERIALS TO THE SITE	
	i) Engine	
	ii) Alternator	
	iii) Radiator Assembly	
	iv) Control panel	
	v) Batteries	
	vi) Acoustic enclosure with base frame	
	vii) Daily service tank	
	viii) Piping	
	ix) Earthing system materials	
	x) Cables	
	xi) Tools	
	xii) Spares	
	xiii) Rest of items	

D. INSTALLATION PROGRAMME

- i) Foundation Work
- ii) Moving units to position
- iii) Assembly
- iv) Electrical work
- v) Earthing system
- vi) Pre-commissioning checks
- vii) Test run and adjustments
- viii) Load and system trail
- ix) Acceptance Tests
- x) Handing over

Date:

Signature of the Tenderer

SCHEDULE – I

ANY OTHER INFORMATION THAT THE TENDERER MAY LIKE TO FURNISH

S. No. Data/information Remarks

Dated:

Signature of the Tenderer

SCHEDULE – ‘J’

PREFERRED MAKES OF EQUIPMENT

- | | | |
|------------------------|---|--|
| 1. Diesel Engine | - | Cummins / Caterpillar / Kirloskar / Greaves Cotton |
| 2. Alternator | - | Stamford / AVK / Kirloskar |
| 3. Contactor | - | G E/ Schneider |
| 4. L.T Switches | - | L & T / Siemens / Alstom |
| 5. H.R.C. Fuse | - | L & T / Siemens / Alstom |
| 6. Cables | - | Gloster / KEI / Finolex |
| 7. Relays (Digital) | - | L & T / Alstom / GE/ Enercon |
| 8. Meters | - | AE / IMP/ Rishab |
| 9. Lead Acid Batteries | - | Exide / Prestolite / Panasonic / Amaron |