



Bharat Heavy Electricals Limited
Electronics Division
Mysore Road, Bangalore – 560 026.
NOTICE INVITING TENDERS

- | | | | | |
|-----|---|---|--|------------------|
| 01. | Tender Number | : | ET / 302, | Date: 03.11.2006 |
| 02. | Name of work | : | Acoustuc Enclosure for Diesel Generator Sets (4 Nos x 1000 KVA each) | |
| 03. | Completion Time | : | 6 Months | |
| 04. | Estimated Cost | : | Rs. 43.48 Lakhs | |
| 05. | Earnest Money Deposit | : | Rs. 1.0 Lakh | |
| 06. | Last Date & Time for the Receipt of Completed Tender. | : | 27.11.2006, 3.00 PM | |
| 07. | Date & Time for Tender Opening | : | 27.11.2006, 3.15 PM | |
| 08. | Place of submission of Tender | : | Tender Box marked as “ Factory Services “ and located at Reception Area of Electronics Division, BHEL Mysore Road, Bangalore – 560 026 | |

This tender document contains 27 pages including the following.

01. Technical cum Commercial bid (Part – I)
02. Instructions to Tenderers
03. Schedule of Work / Price bid (Part – II)
04. Layout Drawing

- Note:**
1. The tenderer shall read the tender documents carefully and fill all the columns neatly. Incomplete tenders may be rejected.
 2. The tenderer shall return the duly filled in tender document after affixing signature on all pages.
 3. The Tenderers shall ensure and put “Technical cum Commercial bid (Part – I)”, DD for the cost of tender documents & EMD, “Instructions to Tenderers” & Drawing together in one cover and “Schedule of Work / Price bid (Part – II)” in a separate cover. Both these covers shall be separately sealed, identified and then put together in a single cover and sealed. All the sealed covers shall be properly identified with necessary information such as Tender reference, type of document put inside, date of tender opening to enable to open the correct document cover only.

Issued to : M/s

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Electronics Division
Mysore Road, Bangalore – 560 026.

PART-1

TECHNICAL-CUM-COMMERCIAL BIDS

(To be furnished by the Bidders)

01. Name of the work : Acoustuc Enclosure for Diesel Generator
Sets (4 Nos x 1000 KVA each)
02. Stipulation period : 6 Months
03. Name of the Contractor :
04. Address :
(a) Office :
.....
.....
Telephone No :
- (b) Residence :
.....
Telephone No :
05. Qualification :
06. Staff Strength :
(a) Technical :
(b) General :

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07. Plant/Equipments :
08. Whether cost of tender document paid :
(in case of download tender document from
website, the same should be enclosed in the form
of **DD in favour of BHEL EDN, Bangalore**)
09. a) Scope of work (as per schedule of items) : Understood / Not Understood
b) Accepted to execute in total : Yes / No
10. Financial Turn Over during : Enclosed / Not Enclosed
last 3 years (Year wise)
11. Experience Certificate for successfully completed : Enclosed / Not Enclosed
similar works during last 7 years as mentioned below
(copy of completion certificate to be enclosed):
(A) Three similar completed works (each not less
than equal to 40% of the estimated cost) :
or
(B) Two similar completed works (each not less
than equal to 50% of the estimated cost) :
or
(C) One similar completed works (each not less
than equal to 80% of estimated cost) :
13. EMD Particulars :
(a) Cash :
(b) Demand Draft / Pay Order :
14. Acceptance
(a) Drawings : Accepted / Not accepted
(b) Designs : Accepted / Not accepted

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15. a) Whether Class –1 License from Electrical : Yes / No
Inspectorate, Karnataka is obtained
(copy to be enclosed)
- b) Validity of License :
(Copy of license to be enclosed)
16. Whether BHEL Payment Terms are acceptable : Yes / No
17. Whether Registered with ESI / PF Authority : Yes / No
- a) If Yes, indicate registration Nos.

ESI No :

PF No :

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INSTRUCTIONS TO TENDERERS

Tender Ref: ET / 302

1. Sealed Tenders for the above noted work are hereby invited from Contractors experienced in works of similar kind and magnitude.
2. Tenders should be addressed to DGM (FS&T), Electronics Division, Bharat Heavy Electricals Limited, Mysore Road, Bangalore – 560 026. The full name and address of the tenderer, name of the work and the date of opening should be indicated on the cover.
- 2.1 The local address of the Contractor, the name of the person to whom all the correspondence are to be addressed should be indicated with telephone number (both office and residence), FAX /e-mail address, Mobile phone No. etc..
3. All entries in the tender documents should be in the same ink. Erasures and over writing are not permitted. The tenderer concerned with proper indication of the name, designation and address of the person signing should duly sign all cancellations and insertions.
4. Tenderers shall fill in all the required particulars in the blank spaces provided for this purpose in the tender documents and also sign each and every page of the tender document including the drawings (wherever applicable) attached there to before submitting tender.
5. Unit rates should be quoted in figures as well as in words in Indian Currency only i.e. Rupees and Paise with reference to each item and for all the items shown in the attached schedule. The rates shall include all taxes and duties payable on account of Service Tax, Sales Tax etc., and also expenses towards PF and ESI contributions (see clauses 8, 39 and Annexure 'C'). Amount of each item and the total on each sheet as also the grand total amount of the whole contract shall be filled by the tenderers.
6. In case the rate quoted in figures differ from those quoted in words, the lower of the rates will be taken as the tendered rate and shall be binding on the tenderers.
7. In quoting their rates, the tenderers are advised to take into account all factors including any fluctuations in market rates. No claim for enhanced rates will be entertained on this account after acceptance of the tender or during the currency of the contract.
8. The rates to be quoted by the tenderer shall be firm and shall cover and include all statutory levies arising from Acts, passed by Parliament or by State legislature and rules framed there under. The rates shall further be deemed to include statutory levies arising from such Acts, Central or State, which may come into force, subsequent to submission of tenders. The tenderer shall note that no claim for enhancement of rates, on the ground that existing statutory levies have been increased, or that new statutory levies have come into effect after tender, or on any other ground, will be entertained on any account.
9. (a) The rates quoted in the tender shall remain valid for a period of 'THREE MONTHS' from the date of opening of tender.

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- (b) Tenderer shall not increase their quoted rates, once the tenderer has submitted his quotation and during execution of the contract in case his tender is accepted.
10. Quantities shown in the attached schedule are only approximate and are liable to variation without entitling the Contractor to any compensation, provided the total value of the contract does not vary by more than 20 % (twenty percent).
11. Before tendering, the tenderers are advised to inspect the site of work and its environments and be well acquainted with the actual working and other prevailing conditions, position of materials and labour. They should be well versed with BHEL General Conditions of Contract, Instructions to tenderers, drawing wherever applicable and specifications and all other documents which form part of the agreement to be entered into subsequent to award of work. The tenderers shall specially note that it is the tenderer's responsibility to provide any item which is not specially mentioned in the specification or drawing, but which is necessary to complete the work.
12. Details and quantities of each item of work shown in the "Bill of Quantities" attached here to are only approximate. They are given as a guide for the purpose of tendering only and are liable to variation and alteration at the discretion of the competent authority. The work under each item as executed shall be measured and priced at the corresponding rates to be quoted by the contractor in the Bill of Quantities attached here to.
13. Should a tenderer find discrepancies or omissions in the drawings wherever applicable / Specifications / Scope of work / Terms & Conditions attached to the tender documents or should be in doubt as to their meaning, he should at once address to the authority inviting the tender for clarifications.
- Every endeavor is made to avoid any error which can materially affect the basis of the tender but the successful tenderer shall take upon himself to provide for the risk of any error which may be subsequently discovered and shall make no subsequent claim on account thereof.
14. In the event of tender being submitted by a firm, the tender must be signed separately and legibly by each partner or member of the firm or in their absence, by the person holding the power of Attorney on behalf of the firm concerned. In the latter case, a copy of the power of attorney duly attested by a Gazetted officer must accompany the tender.
15. In case, the date of tender opening falls on Holiday, the tender will be opened on the next working day.
16. Every tender must be accompanied by deposit receipt for the amount mentioned as Earnest Money Deposit. This earnest money will be refunded to the unsuccessful tenderers after finalisation of the award of work. In the case of successful tenderer, the earnest money will be retained as part of the Security Deposit for satisfactory completion of the work in accordance with Clause – 16 of the BHEL General Conditions of the Contract. Tenders without Earnest Money Deposit receipts are liable to be rejected. No interest will be paid on the earnest money deposits.

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17. The Earnest Money Deposit shall be submitted along with Technical bid and may be furnished in any of the following forms :
- (a) Cash
 - (b) Pay Order / Demand Draft
18. Unless the Contractor whose tender is accepted signs the contract agreement within fifteen days (15 days) of the date of the order directing him to do so, the amount of Earnest Money already deposited by him may be forfeited and acceptance of his tender withdrawn.
19. If, after opening of tenders, a tenderer revokes his tender or increases his earlier quoted rates or after acceptance of his tender does not commence the work in accordance with the instructions of Engineer-in-charge, the Earnest Money Deposited by him will be forfeited and acceptance of his tender withdrawn. If only a part of the work included in the tender had been awarded to the tenderer, the amount of Earnest Money to be forfeited will be based on the value of the contract so awarded.
20. BHARAT HEAVY ELECTRICALS LIMITED reserves the right to reject any or all the tenders received or accept any tender or part thereof without assigning any reason thereof. In the case of acceptance of a part of tender, the time for completion may also be reduced to the extent considered appropriate by the accepting authority.
21. Conditional and unsigned tenders, tenders containing absurd rates and amounts, tenders which are incomplete or otherwise considered defective, tenders which are not in accordance with the tender conditions laid down by the Accepting Officer and tenders not submitted in the prescribed forms are liable to be rejected.
22. The contractors who are not on the approved list of contractors of this organisation must submit the following testimonials simultaneously with their tenders. These testimonials shall be signed by the person (s) issuing the same indicating their name, designation and full address.
- i) A certificate to establish that the tenderer is an independent contractor working on his own.
 - ii) At least 2 certificates from responsible officers of Government or firms of repute, regarding the tenderer's capacity to undertake and carry out the work tendered for / similar work satisfactorily.
 - iii) A certificate from a Bank of standing or magistrate regarding the tenderer's financial position.

Note: (a) Copies of testimonials unless attested by a Gazetted Officer will not be accepted.

(b) Non – submission of the above testimonials simultaneously with the tenders may result in the tenders being rejected.

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23. The tenders should be accompanied by a list of contracts already held by the Contractor at the time of submitting the tender and giving the following particulars:
- (a) Name of work, value and address.
 - (b) The balance work remaining to be done on the same.
24. Tenders submitted by post should be sent by “Registered Post with Acknowledgement due”. These should be posted with due consideration for any delay in postal delivery. Tenders received after the due date of opening of tenders are liable to be rejected.
25. The Contractor’s responsibility under this contract shall commence from the date of receipt of the order or acceptance of his tender.
26. If a tenderer expires after the submission of his tender or after the acceptance of his tender, BHEL may, at their discretion, cancel such tender.
- If a partner of the firm expires after the submission of the Tender, after the acceptance of the Tender, BHEL may cancel such Tender at the discretion unless the firm retains its character (s).
27. BHARAT HEAVY ELECTRICALS LIMITED will not be bound by any power of Attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. They may however, recognise such power of Attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.
28. If the tenderer deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage. Further the tenderer will be liable for any damage caused.
29. Words imparting the singular number shall be deemed to include the plural number and vice-versa where the context so requires.
30. The General and Special Conditions of Contract are complementary to each other and where they are in conflict, the special condition shall prevail.
31. The expenses for completing the stamping the agreement shall be paid by the contractor.
32. Unless and otherwise stated all tendered work includes supply, erection, testing and commissioning of equipment as agreed to in the contract.

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- 33 After completion of the job, the contractor has to furnish actual drawings of work done in consultation with Engineer-in-charge.
- 34 Any covering letter and comments of the Contractor should be submitted in duplicate along with the offer.
- 35 The Contractor shall provide all the materials needed for trial run, testing including chemicals, consumables etc. In quoting their rates, the Contractors are advised to take into account the cost of the above materials.
- 36 Should a tenderer or a contractor on the list of approved contractors have a relative or in the case of firm or Company of Contractors any of its share holder's relative is employed in a Gazetted Capacity in the Electronics Division of Bharat Heavy Electricals Limited, Bangalore – 26, the authority inviting tenders shall be informed of this fact at the time of submission of the tender, failing which tender may be disqualified or if such a fact subsequently come to light, the relevant provisions of the General Conditions of Contract will apply.
- 37 These 'INSTRUCTIONS TO TENDERERS' & 'GENERAL CONDITIONS OF CONTRACT OF BHEL' shall be deemed to form an integral part of the contract agreement for the work to be entered into. In cases of variation between the two in any matter, the conditions in the 'THE INSTRUCTIONS TO TENDERERS' shall prevail. Extracts of some of the important clauses of BHEL G.C.C are enclosed (Annexure containing extracts of clauses 20, 38 and 58 of BHEL GCC). The contractor has to obtain, at his cost, a copy of the BHEL GCC, scrutinise the same, and when submitting his tender, indicate his acceptance of BHEL GCC in the proforma enclosed at Annexure B.
- 38 All operations to be carried out by the Contractor during the execution of the contract such as drilling, welding etc., shall be done with proper equipment brought by the tenderer. Suitable power point will be provided and tapping from the power point to equipment shall be done using proper size of cable ,equipment and after getting approval of connections from our Engineer-in-charge.
- 39 The Contractor shall comply with the provision of Employees Provident Fund and Miscellaneous Provisions Act 1952 and rules, regulations and other orders issued thereunder. He, as an employer, shall be liable to pay employer's contribution/deductions towards PF under the PF Act in respect of all labour employed by him, for the execution of the contract in accordance with the provisions of the Employees Provident Funds and Miscellaneous Provisions Act, 1952 as amended from time to time. For this purpose he shall indicate the code number obtained from the Regional Provident Fund Commissioner or he should obtain a code number if he has not and produce the Photostat copy of the challan / receipt of monthly remittance of the contribution made by him to the PF Commissioner. Final payments due to him will be released only on production of a "No due certificate" from the Regional Provident Fund Commissioner wherever applicable. He shall also furnish such returns as are due, under the Act, to be sent to the appropriate authorities through the Principal Employer".

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- 40 The Contractor should get himself registered with the E.S.I. Authorities as an independent Employer, obtain a separate code number and remit the dues in respect of the labour employed by him for the work and produce the Challans / Receipts of remittance of the ESI contributions due

under the E.S.I. Act to the Company authorities. He shall also furnish such returns, as are due, under the Act, to be sent to the appropriate authorities through the Principal Employer.

- 40.1 If any action is brought in by P.F. Commissioner/ESI authorities on BHEL for the work done by the Contractor for his labourers regarding PF/ESI amount due, short remittances, non remittances etc., the Contractor shall defend the case on behalf of BHEL and/or reimburse BHEL the expenses so incurred.

- 40.2 If applicable, the Contractor shall apply and obtain license under Contract labour (R&A) Act 1970 and comply with the relevant provisions of this Act in respect of the labour employed by him for executing this contract. The Contractor shall furnish necessary returns to the authority through the Principal Employer.

- 41 If applicable, the Contractor shall insure all his labourers and materials. Any claim by his employees for the damages shall be settled by the contractor even action is against BHEL or to reimburse the legal expenses incurred by BHEL

- 42 Any action brought in by anybody on BHEL regarding patent, right etc., used by contractor in execution of work shall be defended by the contractor and / or reimburse to BHEL the cost of the same.

- 43 Contractor shall produce necessary records, documents, explanation whenever he is called upon to do, by any Government. Agencies like ESI, PF, VIGILANCE etc.,

- 44 TERMS OF PAYMENT :

- a) 56.25% of total contract value will be paid against the supply of materials at site and acceptance on prorata basis.
- b) 33.75 % of the contract value will be paid on completion of erection on prorata basis.
- c) Balance 10 % of the contract value will be paid after ;
 - i) satisfactory commissioning and handing over the entire system and
 - ii) On your submitting a Bank Guarantee for a value of 50 % of the Security Deposit towards performance guarantee to the extent required to cover the warrantee period.
 - iii) For the works which do not involve supply of materials, erection and commissioning, the terms of payment will be as per discretion of Executive in charge of BHEL.

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45 SECURITY DEPOSIT

45.1 The successful tenderer shall deposit the Security deposit before start of the work. The rate of Security deposit will be as below.

Upto Rs. 10 Lakhs	10 %
Above Rs. 10 Lakhs upto Rs. 50 Lakhs	Rs. 1 Lakh + 7.5% of the amount exceeding Rs. 10 Lakhs
Above Rs. 50 Lakhs	Rs. 4 Lakhs + 5 % of the amount exceeding Rs. 50 Lakhs

45.2 Security deposit may be furnished in any one of the following forms

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order, Demand Draft in favour of BHEL
- iii) Local Cheques of scheduled banks, subject to realization.
- iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back)
- v) Bank Guarantee from scheduled Banks / Public Financial Institutions as defined in the Companies Act subject to a maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL.
- vi) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C. BHEL, duly discharged on the back.
- vii) Security Deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of Security Deposit shall be deposited before start of the work and the balance 50% may be recovered from the running bills.
- viii) EMD of the successful tenderer shall be converted and adjusted against the security deposit.
- ix) The Security deposit shall not carry any interest.

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NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will subject to hypothecation or endorsement on the document in favour of BHEL. However, BHEL will not be liable or responsible in any matter for the collection of interest or renewal of the documents or in any other matter connected therewith.

46 RUNNING ACCOUNT PAYMENTS

During execution of work, payments of all works in place will be made on the basis of measurements recorded in measurement sheet / book in respect of items executed but no claim on the account will be entertained, if for any reason payments are not so made.

- 47** The work shall be carried out as per detailed specifications enclosed with the tender. The items for which there is no mention in the drawings, detailed specifications to relevant IS specifications (latest edition) shall be followed.

48 CLEANING OF SITE:

After completion of the work, the contractor shall remove all debris, take away left over construction materials, machine, equipment, temporary offices, stores, work shop etc. and make the area neat and clean. The cost of this work shall be included in the quoted rate.

49 COMPLETION OF WORK AND MEASUREMENT

- a) On completion of the work, the contractor must submit to the Engineer the following documents for passing of works.
- b) A copy of the working drawing showing thereon all addition and alterations in the process of execution and.
- c) The authorised Contractor's representative and a representative of the Employer shall jointly sign a certificate of handing over of any completed work and the date of signature of that certificate will be that the date from which the maintenance period of that unit will be reckoned.

50 MAINTENANCE OF WORKS

The contractor will be responsible for the maintenance of works during the period of execution until the various items are taken over, and for a further period of Six months, from the date of taking over.

51 EXTRA ITEMS :

No extra items of work shall be carried out by the contractor other than those authorised to do so in writing by the Engineer. For any such items of work executed as per instructions of Engineer, The rates will be fixed on the basis indicated under clause 50 of BHEL GCC.

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52 SUPPLY OF MATERIALS BY CONTRACTOR :

- i) The work is for a completed job including labour and supply of all except those otherwise specified in the bid document.
- ii) All materials supplied by the contractor according to the contract conditions shall be subject to inspection and passing by the Engineer or his representatives from time to time, the contractor shall provide all facilities for such inspection free cost. BHEL officers connected with the contract shall have the power at any time to inspect and examine any stores or materials intended to be used in or on the work, whether on the site or at any factory or workshop or other place the same are laying and the contractor shall give necessary facilities for such inspection and examination.
- iii) The contractor shall submit necessary Test Certificate / Calibration certificate for the critical items wherever necessary.

53 INTERRUPTION TO WORKS :

- i) In quoting the rates / prices the contractor should take in to account the fact that due to the design or other stipulations at site, or the necessity to follow a particular sequence of overall construction operation, or non – supply of particular drawings, or the connected work or other reasons, interruptions are likely to be encountered in a work of this nature and magnitude. No claims for such interruption will be entertained on any account.
- ii) Extension of time or penalty / liquidated damages as the case may be will be determined as stipulated in clause 7, 9 and 41 of BHEL General Conditions of Contract.

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Annexure “A”

ACCEPTABLE MAKES OF MATERIALS

1. H.T. OCB	BHEL / Crompton
2. L.T. ACB	Siemens / L&T / E.E. / GE / C & S
3. MCCB/ELCB/RCCB	Siemens/ L& T/ Crompton/ GE/ MDS / Legrand
4. MCBs & MCB Boards	Siemens/ GE/ MDS / Legrand / Indo Asian
5. L.T. SDU / FSU / SFU	Siemens/ L&T / E.E./ GE / C&S / Hevell's
6. L.T. Isolator	Siemens/L & T/EE/GEC / MDS / Legrand
7. Change over switches	C&S / HPL/ Indo Asian/ Hevell's / L&T
8. Rotary/Selector switches	Siemens/ L & T/ Kaycee/ Thaker/ Reco /Switchtron / Salzer
10. Limit switches	Siemens/ BCH/Essen
11. Toggle switches	Reco/ Kaycee
12. Power Transformers	BHEL/ Crompton/ Kirloskar/ ABB
13. CTs & PTs	TELK/ Kappa/ Siemens/ Indcoil/AEL/ Kalpa
14. Control Transformers	Indcoil/ Emco/ Kappa/ Kalpa/AEL
15. Motors	BHEL/ Siemens/ ABB/ Crompton Kirloskar/ AEI/ BEACON
16. Motor Starters	Siemens/ L&T/ BCH
17. Airbreak Contactors	Siemens/ L&T/ BCH / Telemechanique
18. Overload relays	Siemens / L & T/ BCH
19. Time delay relay	Siemens/ BCH/ L&T/ EE
20. Single phase Preventer	Siemens/ L & T/ BCH
21. Push button & Indication Lamps	Siemens/ L & T/ Vaishno/ Technic
22. Measuring Instruments	AE/ MECO/ IMP/ ENERCON/ ALACRITY
23. Energy Meters	BHEL/.ENERCON/ ALACRITY/ MECO
24. Protective Relays	E.E./ Easun Rerole/ EMCO
25. Cables	CCI/ Universal/ Fort Gloster/ Asian/ Nicco/ Premier/ Polycab/ Hevells
26. PVC insulated copper wires	Finolex/ Wincap/ Polycab/ Anchor
27. Copper Lugs	Dowell / Comet / Uma
28. Telephone cables	Delton/ HCL
29. Fuse & Fuse Distribution Boards	E.E/ Siemens/ L & T./ Standard / Indo Asian / Hevell's
30. Bus bar trunking & tap off units	E. E /GEC
31. Light/ Street Light fittings	Philips/ GEC/ Crompton/ Bajaj
32. Voltage stabilisers	Auto Elec/ Aplab/ Keltron
33. Sodium vapour light fittings	Philips/ GEC/ Crompton
34. Ceiling/Pedestal/Wall Mounting fans (Light duty)	GEC/ Crompton/ Orient/ Usha/ Bajaj/ Khaitan
35. Pedestal fans (Heavy duty)	Almonard/ Crompton /GE
36. Exhaust fans	GEC/ Crompton/ Usha/ Bajaj/ Khaitan
37. Piano type switches, sockets, plugs, Ceiling Rose	Anchor/ Record/ Anchor-Roma/Anchor- Diana/ Lisha./ MK/ LK

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38. Industrial Plug & sockets	Crompton/ BCH/ Legrand
39. MCB Distribution Board	MDS/ Legrand/Siemens / BCH/ Indo Asian
40. Power Capacitors (HT/LT)	BHEL/Khatau Junker/GEC/ Asian/ Unistar
41. Cable tray	MEK/ Indiana
42. Conduit pipes & accessories	GB / BHARAT/ Universal/ Uniplast
43. Cable sockets/Glands	Dowels / Lotus/ Braco / Comet / Jainson
44. Semi conductors	BHEL/ HI Rect/ Ruttansha
45. Electronic choke/Ballast	Best Choice/ Opal/ Philips/ Taurus/ Intelux
46. Casing & Capping	MODI / MKI
47. Electronic fan Regulator	Rider/ Anchor/ Lisha / Usha/Bajaj
48. Bakelite fuse cut-outs	EE/ Standard / Indo Asian/L&T
49. Bulk Head Fittings	CEALITE / CROMPTON/Bajaj
50. Fancy light fittings & other items	As required & approved by BHEL-EDN

Note : 1) Contractors shall use only Standard / ISI marked items after approval of Engineer – in – charge of BHEL, for items not listed above.

2) Contractors intending to supply of materials other than those makes as listed above shall indicate the MAKES considered in their offers with the catalogues. The right of accepting such alternate makes rests with the BHEL.

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ANEXURE: 'B'

GENERAL CONDITIONS OF CONTRACT

It is hereby agreed by me/us that the BHEL General Conditions of Contract including subsequent amendments/ additions/ deletions to clauses if any, and conditions pertaining to the settlement of disputes by Arbitration form an integral part of the tender documents and that the tender submitted by me / us is subject to the aforesaid BHEL General Conditions of Contract which has been read and accepted by me/us.

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ANNEXURE ‘C’

CLAUSE 20 OF GENERAL CONDITIONS OF CONTRACT

LABOUR

The Contractor shall employ labour in sufficient numbers either directly or through sub-contractors to maintain the required date of progress and of quality to ensure workmanship to the degree specified in the contract and to the satisfaction of the Engineer-in-charge. The contractor shall not employ, in connection with the works, any person who has not completed eighteen years of age.

The Contractor shall furnish to the Engineer-in-charge, at the intervals specified by him, a distribution return of the number and description by trades of the work people employed on the works. The Contractor shall also submit on the 4th and 19th of every month to the Engineer-in-charge a true statement showing in respect of the second half of the preceding month and the first half of the current month (i) the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (ii) the number of female workers who have been allowed maternity benefits as provided in the Maternity Benefit Act, 1961 or Rules made there under and the amount paid to them.

The Contractor shall pay to labour employed by him, either directly or through sub-contractors, wages not less than fair wages, as defined in the Contractor’s Labour Regulations.

The Contractor shall in respect of labour employed by him, either directly or through sub-contractors, comply with or cause to be complied with contractor’s labour Regulations in regard to all matters provided therein.

The Contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Workmen’s Compensation Act 1923, Industrial Disputes Act, 1947, Maternity Benefit Act 1961, or any modifications thereof or any other law relating there to and rules made thereunder from time to time.

The Contractor shall be liable to pay his contribution and the employees’ contribution of the State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of “The Employees’ State Insurance Act, 1948,” as amended from time to time. The Contractor shall apply to the ESI Authorities, get himself registered with them and obtain a code Number. He shall pay the remittances under his Code Number only.

The Contractor shall be liable to his contribution and the employees contribution towards PF as per Provident Fund Rules and Regulations, in respect of all labour employed by him for the execution of the contract. The Contractor shall apply to the PF Authorities, get himself registered and obtain a code number from them. He shall pay the remittances towards PF under his code number only.

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The Engineer-in-charge shall, on a report having been made by an Inspecting Officer as defined in the Contractor's Labour Regulations, have the power to deduct from the moneys due to the contractor any sum required or estimated to be required, for making good the loss suffered by a worker or workers by reason of non fulfillment of the conditions of the contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which are not justified by the terms of the Contract of non observance of the said Contractor's Labour Regulations.

The Contractor shall indemnify BHEL against any payment to be made under and for observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.

In the event of the Contractor committing a default or breach of any of the provisions of the aforesaid contractor's Labour Regulations, as amended from time to time or furnishing any information or submitting or filling any form / Register / Slip under the provisions of these Regulations which is materially incorrect, then, on the report of the Inspecting Officers as defined in the Contractors Labour Regulations, the Contractor shall without prejudice to any other liability pay to BHEL a sum not exceeding Rs. 50/- as liquidated damages for every default, breach, or furnishing, making, submitting, filling materially incorrect statements as may be fixed by the Engineer – In – Charge and in the event of the contractor's default continuing in this respect, the liquidated damages may be enhanced to Rs. 50/- per day for each day of default subject to a maximum percent of the estimated cost of works put to tender. The Contractor shall defend the case by himself any action brought in by such Government Agencies for non-compliance of any Labour Regulations and / or reimburse the expenses incurred by BHEL in this regard.

The Engineer-in-charge shall deduct such amount from bills or security deposit of the Contractor and credit the same to the welfare fund constituted under Regulations. The decisions of the Engineer-in-charge in this respect shall be final and binding.

MODEL RULES FOR LABOUR WELFARE

The Contractor shall, at his own expense, comply with or cause to be complied with Model Rules for Labour Welfare as appended to these conditions or rules framed by Government from time to time, for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the Contractor fails to make arrangements as aforesaid, the Engineer-in-charge shall be entitled to do so and recover the cost thereof from the contractor.

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SAFETY CODE

**RESPONSIBILITIES OF THE CONTRACTOR IN RESPECT OF
SAFETY OF MEN, EQUIPMENT, MATERIAL AND ENVIRONMENT**

1. Before commencing the work, the contractor is required to submit a “SAFETY PLAN” to the authorised BHEL Official. The ‘Safety Plan’ shall indicate, in detail, the measure that would be taken by the contractor to ensure safety of men, equipment, material and environment during execution of the work. The plan shall take care to satisfy all requirements specified hereunder. The contractor shall submit safety plan along with his offer. During negotiations before placing of work order and during execution of the contract, BHEL shall have right to review and suggest modification in the Safety Plan. The contractor shall abide by BHEL’s decision in this respect.
2. The contractor shall take all necessary safety precautions and arrange for appropriate appliances as per direction of BHEL, or its authorised officials, to prevent loss of human lives, injuries to personnel engaged, and damage to property and environment.
3. The contractor shall provide to its work force and ensure the use of the following personal protective equipment as found necessary and as directed by the authorised BHEL officials:-
 - (i) Safety Helmets conforming to IS – 2925: 1984.
 - (ii) Safety Belts conforming to IS – 3521: 1983.
 - (iii) Safety Shoes conforming to IS – 1989: 1978.
 - (iv) Eye and Face Protection devices conforming to IS – 8520: 1977
and IS – 8940: 1978.
 - (V) Hand and body protection devices conforming to:
 - IS – 2573: 1975
 - IS – 6994: 1973
 - IS – 8807: 1978
 - IS – 8519: 1977.

All tools, tackles, lifting appliances, material handling equipment, scaffolds, cradles, safety nets, ladders, equipment etc. used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained, before putting them to use and from time to time as instructed by authorised BHEL official who shall have the right to ban the use of any item.

All electrical equipment, connections and wiring for constructions, power, its Distribution and use shall conform to the requirement of Indian Electricity Act and Rules. Only electricians licensed by the appropriate statutory authority shall be employed by the contractor to carry out all types of electrical works. All electrical appliances including portable electric tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed.

The Contractor shall not use any hand – lamp energised by electric power with supply voltage of more than 24 Volts. For work in confined spaces, lighting shall be arranged with power source of not more than 24 Volts.

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The contractor shall adopt all fire safety measures as laid down in the “Code for Fire Safety at Construction sites” issued by the Safety Department of the Construction management (HQ) of BHEL and as per the directions of the authorised BHEL official. A copy of the above referred “Code of Fire Safety at Construction Sites” shall be made available by BHEL to the contractor for reference, on demand by the contractor, during tendering stage itself.

Where it becomes necessary to provide and/or store Petroleum Products, explosives, chemicals and liquid or gaseous fuel or any other substance that may cause fire or explosion, the contractor shall be responsible for carrying out such provisions and/or storage in accordance with the rules and regulations laid down in the relevant government acts, such as Petroleum Act, Petroleum and Carbides of Calcium Manual of the Chief Controller of Explosives, Govt. of India etc., Prior approval of the authorised BHEL official at the site shall also be taken by the contractor in all such matters.

The contractor shall arrange at his cost (wherever not specified), appropriate illumination at all work spots for safe working when natural daylight may not be adequate for clear visibility.

The contractor shall be held responsible for any violation of statutory regulations local, state or central and BHEL instructions, that may endanger safety of men, equipment, material and environment in his scope of work or another contractor’s or agency’s. Cost of damages if any, to life and property arising out of such violation of statutory regulations and BHEL instructions, shall be borne by the contractor.

In case of a fatal or disabling injury / accident to any person at construction sites due to lapses by the contractor, the victim and/or his/her dependents shall be compensated by the contractor as per statutory requirements. However, if considered necessary, BHEL have the right to impose appropriate financial penalty on the contractor and recover the same from payments due to the contractor for suitably compensating the victim and/or his/her dependents. Before imposing any such penalty, appropriate enquiry shall be held by BHEL giving opportunity to the contractor to present his case.

In case of any damage to property due to lapses by the contractor, BHEL shall have the right to recover cost of such damages from payments due to the contractor after holding an appropriate enquiry.

In case of any delay in the completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have right to recover cost of such delay from payments due to the contractor, after notifying the contractor suitably and giving him opportunity to present his case.

If the contractor fails to improve the standards of safety in its operation, to the satisfaction of BHEL, after being given a reasonable opportunity to do so and / or / if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions regarding safety issued by the authorised BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor, after giving a notice of not less than seven days, indicating the steps that would be taken by BHEL.

The contractor shall submit report of all accidents, fires and property damage, dangerous occurrence to the authorised BHEL official immediately after such occurrence, but in any case not later than twelve hours of the occurrence. Such reports shall be furnished in the manner prescribed by the contractor to the authorised BHEL official from time to time as prescribed.

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Before commencing the work, the contractor shall appoint/nominate a responsible officer to supervise implementation of all safety measures and liaison with his counterpart of BHEL.

If the Safety record of the contractor is to the satisfaction of Safety Department of BHEL, issue of an appropriate certificate to recognise the safety performance of the contractor may be considered by BHEL after completion of the job.

ANNEXURE: ‘D’

CLAUSE 38 OF BHEL GENERAL CONDITIONS OF CONTRACT

INSURANCE OF WORKS AGAINST DAMAGE AND LOSS DUE TO FIRE, STRIKE, TEMPEST, FLOODS, EARTHQUAKE, RIOT AND AGAINST DAMAGE BY AIRCRAFT

The contractor shall, within one month after the date of acceptance of the contract, insure the work against loss and damage by fire, tempest, floods, earthquake, riots, strike and against damage by aircraft with an insurance office approved by the accepting officer, from the date of acceptance of work or actual commencement of work whichever is earlier. Such insurance shall be effected in the name of BHEL and shall be for the full value of the contract sum. The contractor shall lodge with BHEL the policies and receipts of the premiums for such insurance and shall maintain such policies in force until the entire completion of the work as certified by the Engineer – In - Charge.

If the contractor fails to comply with the terms of this condition, the accepting officer may insure the work and may deduct the amount of premiums from any money that may become payable to the contractor or may at his discretion refuse payment of any advance/payment to the contractor until the contractor shall have complied with the terms of this condition.

Such insurance whether effected by the Accepting officer or the Contractor shall not be a limit or bar to the liability and obligation of the contractor to complete the entire work in all respects as certified by the Engineer – In – Charge.

In case of such a loss or damage as aforesaid, the money payable under any such insurance shall be received and may be retained by BHEL until the work is finally completed and shall then be credited to the contractor in the final statement of accounts in the event of the contract not having been previously cancelled under these conditions, after taking into account the delay in completion, settlement to his workers for damages, damage to BHEL’s Property etc.

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ANNEXURE 'E'

CLAUSE 58 OF GENERAL CONDITIONS OF CONTRACT

ARBITRATION:

Except where otherwise provided for in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works, or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the Executive Director/General Manager of BHEL and if the Executive Director/General Manager is unable or unwilling to act to the sole arbitration, some other person appointed by the Executive Director/General Manager, willing to act as such Arbitrator. There will be no objection if the arbitrator so appointed is an employee of BHEL-EDN or an employee of any other unit of BHEL and that he had to deal with the matters to which the contract relates and that in the course of his duties as such he had expressed views on all or any of the matters in dispute or difference. The Arbitration to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, such Executive Director/General Manager as aforesaid at the time of such transfer, vacation of office or inability to act, shall appoint another person to act as Arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. It is also a term of this contract that no person other than a person appointed by such Executive Director/General Manager or an employee appointed as Arbitrator as aforesaid should act as Arbitrator and the Arbitrator shall give reasons for the award.

Subject as aforesaid the provision of the Arbitration Act, 1940 or any statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of the contract that the party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this clause, together with the amount or amounts claimed in respect of each such dispute.

The arbitrator (s) may from time to time with consent of the parties extend the time, for making and publishing the award.

The work under the contract shall, if reasonably possible, continue during the arbitration proceedings and no payment due or payable to the contractor shall be withheld on account of such proceedings.

The arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties fixing the date of the first hearing. The arbitrator shall give a separate speaking award in respect of each dispute or difference referred to him.

The venue of arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The award of the arbitrator shall be final, conclusive and binding on all parties to this contract.

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Annexure - F

**BHARAT HEAVY ELECTRICALS LIMITED
ELECTRONICS DIVISION
&
ELECTRONICS SYSTEMS DIVISION
BANGALORE**

HEALTH, SAFETY & ENVIRONMENTAL POLICY

The Management is committed to be an environmentally sound company in its activities, products, services and to provide safe and healthy working environment covering its employees, products & services as an integral part of business performance through :

- ★ Compliance with applicable Legislation and Regulations
- ★ Setting objectives and targets to eliminate / control / minimise environmental pollution, risks due to Occupational Health and Safety Hazards
- ★ Promotion of activities for conservation of resources by environmental management with focus on oil, electrical energy and chemicals
- ★ Enhancement of Environmental, Safety and Occupational Health awareness amongst employees, customers, suppliers, contractors by pro-active communication
- ★ Regular evaluation and pro-active measures for prevention & control of environmental pollution/accidents / occupational diseases
- ★ Appropriate training of employees and interested parties on Health, Safety & Environmental (HSE) aspects
- ★ Formulation and maintenance of HSE Management Programs for continual improvement
- ★ Periodic review & audit of HSE Management System to ensure its continuing suitability, adequacy and effectiveness
- ★ Communication of HSE Policy to all employees and interested parties
- ★ Co-operation with concerned agencies / regulatory bodies engaged in HSE activities.

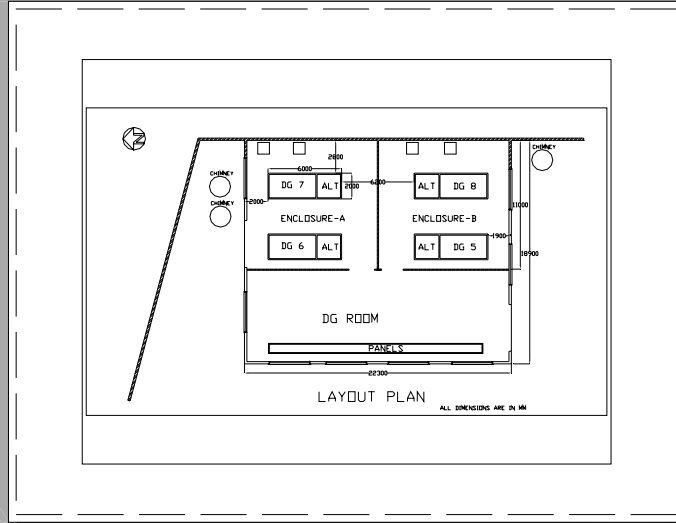
Sd.
RAMJI RAI
EXECUTIVE DIRECTOR
BHEL (EDN) BANGALORE

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Bharat Heavy Electricals Limited
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Price Bid (Part - II)

Acoustic Enclosure for 4 x 1000 KVA, Diesel Generator Sets

Tender Ref: ET / 302

Sl. No.	Description of work	Unit	Qty	Rate (Rs)	Amount (Rs)
	Tender Specifications :				
	<p>I. Project Scope: Design, Manufacture, Supply and installing of “Walk-in-type”, modular acoustic enclosures for 4 x 1000 KVA Diesel Generator Sets (1 x1000 KVA Water cooled and 3 x 1000 KVA Radiator Cooled). Two Enclosures sets i.e. ‘Enclosure A’ & ‘Enclosure B’ as mentioned below are to be designed and commissioned. The sketch for enclosures is enclosed in the Annexure for reference only. The exact dimensions of the enclosures shall be as per site conditions.</p> <p>Note: The bidder is expected to visit the site with prior intimation to familiarize with the site conditions before submitting the offer.</p> <p>II. Specifications / Material of construction:</p> <ul style="list-style-type: none"> The enclosure should be made up of modular, preformed acoustic panels of minimum 100 mm thick, having a composite, multi-density sound absorbing insulation of 100 mm thick, 64 kg / cum density, covered with glass tissue and sandwiched between external primered and painted external 16 swg MS/CR sheets and internal galvanized perforated sheet of 0.8mm The enclosure panels should be fitted onto a sturdy MS / CR preformed channel framework with required gaskets, brackets and fixtures. Standard, soundproof doors and double glassed window system to be provided wherever necessary without compromising acoustic parameters. All panels should be removable type and should be able to dismantle and refit during maintenance cycle. The enclosures should be mounted on a specially prepared base frame. 				

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Tender Ref: ET / 302

Sl. No.	Description of work	Unit	Qty	Rate (Rs)	Amount (Rs)
	<ul style="list-style-type: none"> □□ Acoustic louvers are to be provided in front of the radiators to aid proper ventilation and noise control for the entire 11 mts Length except at places of obstructions for structural members of the shed. The enclosure should be painted with epoxy based primer and paint Lighting : Providing suitable internal light fittings with complete wiring inside the enclosure. Ventilation: Ventilation louvers, fresh air intake and ventilation fans are to be provided wherever necessary to maintain the internal temperature + 5° C to ambient. <p>III. Noise Level :</p> <p>The enclosure should be designed to achieve post treatment sound level of 75 dBA measured at a distance of 1 meter from the treated periphery.</p> <p>IV: Electrical :</p> <p>Providing general and suitable lighting inside the enclosures and also to make required electrical connections to the ventilation fans will be in the bidder's scope.</p> <p>V: GA drawing :</p> <p>The size of the DG Room having AC sheet roof is apprx. 22.3 Mts (L) x 18.9 Mts (W) x 6.5 Mts (H). The GA drawing of the Generator Room and enclosures is enclosed for reference only and the tenderer to visit the site and assess for the exact size of enclosures and all other works before submitting the offer. The approx. size of the two enclosures are given below.</p>				
1	Enclosure - A:				
	The enclosure, as detailed above, will house 2 nos. x 1000 KVA Radiator Cooled DG Sets. The size of the enclosure will be apprx. 11mts (L) x 11 mts (B) x 3.6 mts (H)	Nos	1		

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Tender Ref: ET / 302

Sl. No.	Description of work	Unit	Qty	Rate (Rs)	Amount (Rs)
2	Enclosure - B :				
	<p>The Enclosure, as detailed above, will house 2 Nos DG sets (i.e. 1 no. x 1000 KVA Radiator Cooled DG Set and 1 no. x 1000 KVA Water cooled DG Set).</p> <p>Forced ventilation system is to be opted in Enclosure B. The scope of work includes design, supply, erection & commissioning of the forced ventilation system. The size of the enclosure will be apprx. 11mts (L) x 11 mts (B) x 3.6 mts (H)</p>	Nos	1		
3	Civil works:				
	<p>Required civil works, such as breaking of walls for hot air to go out, providing platform / pedestal and other masonry work for erection of enclosures, if any, will be a part of the contract and to be executed by the successful bidder.</p> <p><u>Note</u> : The bidder is expected to visit the site with prior intimation to familiarize with the site conditions and assesment of work and size of the enclosure before submitting the offer.</p>	LS	1		
	Total				

(Rupees

Only)

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