

Tenders should be dropped in vendor complex only



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDHRAPURAM : : HYDERABAD-502 032
(M&S DEPARTMENT/ P&C)

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NOTICE INVITED TENDER

NIT NO. M&S/P&C/2010/22

DATED: 26.11.2010

Sealed tenders in two parts (Techno commercial and Price bid) will be received by the undersigned from the contractors satisfying the prequalification requirements indicated below, Technical bid will be opened after 13.30 hrs on the due date itself in the presence of tenderer's or their authorized representatives at vendor complex adj to Admn reception gate in BHEL, Ramachandrapuram, Hyderabad.

1. Name of work : REPAIR of KIRLOSKAR CUMMINS MAKE
DG SET 1000 KVA- 2 Nos; MODEL KTA-
3067-G SL NO 25159572,25157195 DG SET
NO 2 & 7 AT OUR Diesel Power House
2. Estimation: 48.19 Lakhs + Taxes, Duties etc
3. Earnest money deposit : Rs. 1,00,000/-
4. Time of Completion : 6 Months
5. Guarantee period : 12 Months
6. Last date of submission of tender : 21.12.2010 before 11.00 am
7. Date and time of opening of tender : Opened after 13.30 Hrs on 21.12.2010
8. Cost of tender documents : Rs. 500/- by way of Cash receipt obtained
from cash office or bankers cheque/ DD

Name & Address of the Bidder:

Phone No. : _____

**SR.DGM/M&S(P&C,Telecom,TPT,PD, Cranes)
BHEL, R.C.PURAM**

(all pages should be signed in the bottom of each and submitted by the bidder)

ANNEXURE-II

**BHARAT HEAVY ELECTRICAS LIMITED
RAMACHANDRAPURAM:: HYDERABAD-502 032**

M&S DEPARTMENT / PLANNING & CO-ORDINATION

Tender schedule for the work of “REPAIR of KIRLOSKAR CUMMINS MAKE DG SET 1000 KVA- 2 Nos; MODEL KTA-3067-G SL NO 25159572,25157195 DG SET NO 2 & 7 ” schedule of work & Terms and Conditions are enclosed

TECHNO- COMMERCIAL BID (PART-I)

This is an indivisible works contract:

This tender schedule must be submitted along with the General Conditions, Special conditions etc. enclosed herewith duly signed and stamped on each page with your covering letter. Remarks should be TYPED/ hand written on tender schedule only. Any deviations / deletions/ additions etc. can be neatly typed on your letter head and can be enclosed with techno- commercial bid document.

To be filled up by the Bidder

AGENCY:

ADDRESS:

CONTACT PERSON:

PHONE/ FAX

EMAIL ID:

| | Description | Acceptance/ Remarks by the Contractor. |
|----|--|--|
| 1. | Experience : in repair/ overhaul of DG sets – capacity 1000 KVA and above : Or Original equipment manufacturer of DG sets capacity 1000 KVA & above Or Authorized dealer for any manufacturer of DG sets capacity 1000 KVA & above Full details furnished in pre qualification part furnish details where the works carried out by you nature of work: | |

| | | |
|----|--|--|
| | <p>Value of contract: Work executed in which year:</p> <p>WORKS executed as per prequalification write down the works in opposite box <i><u>copies are to be enclosed with your offer</u></i> Values should be obtained from pre- qualifications 1 work not less than Rs 33,56 lakhs/- each 2 works not less than Rs 24.10 Lakhs each 3 works not less than Rs 19.28 lakhs each</p> | |
| 2 | OEM/ Authorized dealer for any manufacturer / repairer | |
| 3 | Quotation Validity- minimum 90 days from technical bid opening date. | |
| 4 | EMD Rs1,00,000/- DD/ Bankers Cheque (clause 3 / 4) page 19 | |
| 5 | Tender Cost: Rs 500/- BHEL Cash receipt/ DD/ Bankers Cheque Details | |
| 6 | Security Deposit clause: Acceptance (Details see under terms and conditions page 20/21) SD will be refundable after expiry of guarantee period | |
| 7 | PAN No: | |
| 8 | Service Tax Regn No: | |
| 9 | VAT/ TIN NO: | |
| 10 | <p>Price Price quoted should be firm during contract period.</p> <p>Nature of tax applicable for this work should be clearly bring in the opposite box.</p> <p>Also bring out taxes are inclusive or exclusive of the offered rate/ amounts in the opposite box.</p> <p>Transportation charges for both ways should be borne by the contractor.</p> <p>- credits arriving from taxes will be availed by BHEL</p> | <p>___ % of tax extra or inclusive</p> |
| 11 | <p>Payment Terms:</p> <p>Full Payment on submission of tax invoice for each DG set. Bill should be recorded in measurement book with details of work carried out. Release of bill payments will take minimum 30 days.</p> | |
| 12 | Advance payment - Nil - will not be released by | |

| | | |
|-----|--|--------------------------|
| | BHEL | |
| 13. | <u>PENALTY:</u> | |
| | 0.5% of the contract value per week or part thereof upto a maximum of 10% of the contract value shall be levied beyond the scheduled completion time. | |
| 14 | Reverse Auction- Acceptance. | |
| 15. | Terms and Conditions / obligations of contractors shall be acceptable. | |
| 16 | Decision of BHEL Representative shall be final in the matter of inspection of work at any stage | |
| 17 | All works should be as per Annexure-I details of work as per price bid | |
| 18 | Turnover: (average 30% on one year estimate i.e Rs.14.50 Lakhs should be for 3 consecutive years 09-10 08-09 07-08 Profit & Loss statements duly signed by a chartered accountant –IT RETURN copies should be produced | AMOUNT Rs Rs Rs |

WORK: REPAIR OF 2 No's of 1000 KVA DG SETS AT BHEL, R.C.PURAM
Engine Information

DG Set-1

ENGINE

MODEL: KTA 3067G
MAKE: KIRLOSKAR CUMMINS
Engine SL.NO: 25159572 (BHEL Sl.no 2)
Manufactured date: 10-02-1988

ALTERNATOR

Frame- 4AB 450/8
MAKE: KIRLOSKAR ELECTRIC CO.LTD,BANGLORE
BRNGS:DE SKF 6324 NDE SKF 6324

DG Set-2

ENGINE

MODEL: KTA 3067G
MAKE: KIRLOSKAR CUMMINS
Engine SL.NO: 25157195 (BHEL Sl.no 7)
Manufactured date: 03-09-1987

ALTERNATOR

Frame- 4AB 450/8

MAKE: KIRLOSKAR ELECTRIC CO.LTD,BANGLORE

BRNGS:DE SKF 6324 NDE SKF 6324

SUB: REPAIR OF 2 No's of 1000 KVA DG SETS AT BHEL, R.C.PURAM**GENERAL INSTRUCTIONS, TERMS AND CONDITIONS , OBLIGATIONS OF THE CONTRACTORS**

| S.No | Description | Bidders compliance Yes/NO | Remarks (If any) |
|-------------|--|--------------------------------------|-----------------------------|
| 1. | <p>SCOPE OF WORK:</p> <p>The scope includes repair and reconditioning of 1000 KVA DG sets of 2 numbers at BHEL on turnkey basis.</p> <p>The scope includes but not limited to the works mentioned in “Schedule of work” for repair and reconditioning of 1000 KVA DG set at BHEL along with the material to be supplied mentioned in Annexure- 1.</p> <p>The material to be supplied shall be of original certified by M/s. Cummins India Pvt.Ltd.</p> <p>The scope includes the repair /recondition of DG set (Diesel Engine and Alternator).</p> <p>After repair/reconditioning of DG set bidder shall demonstrate the performance of DG set to BHEL personnel up to their satisfaction and all the parameters shall be ensured as per Indian Standards and APPCB norms.</p> | | |
| 2. | <p>MATERIAL: The Material required for the DG set Repair is mentioned in Annexure-1 & Annexure-2. Materials in Annexure-1 can be used for replacement by the bidder after the joint inspection conducted at bidder's site. Remaining material and the replaced parts (old) shall be returned to the BHEL along with the reconditioned engine.</p> <p>Materials in Annexure-2 will be supplied by BHEL subjected to the joint inspection report. But the transportation charges shall be included in bidder's scope.</p> | | |

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| 3. | <p>GUARANTEE:</p> <p>The bidder shall give 12 months guarantee from the date of successful completion of repair and handover to BHEL.</p> <p>REGARDING QUALITY OF MATERIAL SUPPLIED:</p> <p>a) Guarantee of all the equipment/materials supplied and replaced shall be procured from OEM of DG and supplied to BHEL, and shall be new, original and free from all defects arising due to defective material or manufacturing defects. b) OEM shall warranty to replace, rectify or repair free of cost at the BHEL site, the component or part of machinery/material proved to have become unserviceable due to any of the above defects within a period of 12 months from the date of installation, in the event of the supplier's not complying with the above within a reasonable time.</p> | | |
| 4. | <p>PRICE CATALOGUE: Bidder shall provide the latest price catalogue for the materials of the DG set model KTA 3067G, immediately after issue of work order .</p> | | |
| 5. | <p>JOINT INSPECTION: Joint inspection (BHEL & Bidder) will be conducted at bidder's site, where detailed list of materials required for repair of engine and alternator will be decided. Then bidder can utilise the materials in Annexure- 1. BHEL will also issue the material mentioned in Annexure-2 subjected to the requirement as per joint inspection. Bidder has to include the transportation charges for delivery of material in Annexure-2 from BHEL, R.C.Puram to Bidder's site.</p> | | |
| 6. | <p>PRE QUALIFICATION CRITERION:</p> <p>Pre-Qualification:</p> <p>1. Turnover – Average annual turnover shall be 14.50 Lakhs or above for last three consecutive years i.e 2007-08, 2008-09 & 2009-10 Profit & Loss statements duly signed by Chartered</p> | | |

| | | | |
|------------------|--|--|--|
| | <p>Accountant shall be submitted along-with tender documents.</p> <p>2. Experience :</p> <p>a) Shall be Original Equipment Manufacturer of DG Sets of Capacities 1000KVA and higher or</p> <p>b) Shall be an authorized dealer for an organization who manufactures DG-Sets of 1000 KVA and above capacities and has experience in Repairs / overhauls to DG Sets of 1000 KVA & above Documentary evidence as authorized dealer of OEM & proof of having executed atleast one job work Repairs / Overhauls to 1000KVA & above Capacity DG Sets satisfactorily in last two years to be furnished or</p> <p>c) i) Experience in Repairs / Overhauls to 1000 KVA DG-Sets fitted with Cummins engine Model ii) Minimum of 3 Sets of 1000 KVA and above ratings DG Sets in last two years Documentary evidence of job work executed to customers satisfaction shall be submitted as proof</p> <p>Details of the works carried out, Job work Title, Contract Value, Year of execution, Rating of DG Set, Engine type, Spares replaced shall be OEM make or procured from other source</p> | | |
| <p>7.</p> | <p>TRANSPORTATION CHARGES:</p> <p>Bidder shall include the transportation charges to and fro, for shifting of the DG sets , spare parts supplied by the bidder / to be issued by BHEL to the bidder's site and back to BHEL, R.C.Puram after successful repair. Also bidder has to include the charges for shifting of materials from BHEL to bidder's site for BHEL issue material in Annexure-2.</p> | | |
| <p>8.</p> | <p>After successful repair of the diesel generator set including alternator, bidder shall demonstrate the performance of DG set in front of BHEL personnel and should be capable of loading at 90% or more for a continuous loading for minimum eight hours after reconditioning.</p> | | |

| | | | |
|------------|--|--|--|
| 9. | OBLIGATIONS OF THE COMPANY If the contractor fails to carry out the repair as per the scope, it will be the responsibility of bidder to assemble back the DG set to the original condition and to the satisfaction of BHEL. No payment is admissible to the bidder in such a case. | | |
| 10. | Gate pass will be arranged by BHEL for shifting of DG set and BHEL issue material mentioned in Annexure-2 to contractor work premises. Vehicle and all other responsibility should be taken care by the contractor. | | |
| 11. | Contractor should arrange all consumable, cleaning agents for repair of DG set. | | |
| 12. | Skilled man power should handle the DG set repairs carefully. | | |
| 13. | DG set should have one year warranty. Undertaking to this effect should be furnished by the contractor on a paper. | | |
| 14. | Best workmen ship is anticipated. | | |
| 15. | Bidder shall ensure supply of genuine spare parts from original equipment manufacturer. | | |

ANNEXURE- IV

SCOPE OF WORK

Works to be carried out: The scope includes but not limited to the works mentioned below for repair and reconditioning of 1000 KVA DG set. Any other work which is required to complete the repair is to be included in the bidder's scope.

| Item | Part | Work Description | Yes/No | |
|-------------|-------------|---|---------------|--|
| 1. | Crank Shaft | Dismantle and clean the crank shaft. If the crank shaft of the above engine found not repairable/reconditionable, dismantle crank shaft from other engine under shutdown provided by BHEL. If a new crank shaft is required, BHEL reserves the right to postpone the work or even cancellation of the tender. | | |

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|-----|-----------------------|--|--|--|
| 2. | Cylinder heads | Dismantle and clean the underside, inlet and exhaust valves and ports. Inspect cooling spaces and clean, if necessary. Overhaul the valve rotators. Check rocker arms. Renew the sealing rings. Replace the O-rings at bottom of cylinder head screws. Grinding of Valve seats & Valves if required. | | |
| 3. | Starting valves | Check starting valves in cylinder heads. Replace parts if necessary. Renew the sealing rings. | | |
| 4. | Camshaft | Inspect contact faces of camshaft. Check the contact faces of the cams and tappet rollers. Check that the rollers rotate. Rotate the engine with the turning gear. Inspect one or two camshaft bearings and renew if necessary. | | |
| 5. | Camshaft driving gear | Visual inspection of intermediate gears and renew parts if necessary. | | |
| 6. | Cylinder liners | Remove and Inspect all cylinder liners. Replace O-rings in the bottom/top part by new ones. Measure the bore. Replace liner if wear limits are exceeded. Hone the liners. Renew the anti-polishing rings. | | |
| 7. | Piston | Pull, clean and inspect. Check the height of the ring grooves. Check the retainer ring of the Gudgeon pins. Replace complete set of piston rings. Note the running in programmed. | | |
| 8. | Connecting rods | Replace big end bearing. Inspect mating surface serrations. Measure the big end bore. Conduct the MPI test. | | |
| 9. | Main bearing | Check condition of main bearings at random. Note the type of bearings in use and do the inspection and accordingly. Renew bearings if necessary. | | |
| 10. | Fuel Injection Pumps | Clean and inspect injection pump, replace the worn parts, replace the erosion plugs, do the calibration of pump and replace the element if necessary. | | |
| 11 | Injector calibration | Injector calibration with spares like B/P, Injector cups etc | | |
| 12. | Starting fuel limiter | Check the function. | | |

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| 13. | Turbocharger | Overhaul the Turbocharger. | | |
| 14. | Guide blocks | Dismantle and inspect at random. Renew parts if necessary. | | |
| 15. | Governor driving gear | Visual inspection of governor driving gear. Replace parts if necessary. | | |
| 16. | Water pump & P.T.Pump | Dismantle and check pump components. Replace worn parts. | | |
| 17. | Lube oil pump | Inspect the lube oil pump driving gear. Inspect the lube oil pump. Replace worn parts. | | |
| 18. | Thermostatic valves | Clean and inspect HT, LT & LO thermostatic elements. Renew worn parts. | | |
| 19. | Hydraulic jacks | Check function at random. | | |
| 20. | Automation | Functional check of the automation. Check function of the alarm and automatic stop devices. | | |
| 21. | Flexible coupling | Check condition of flexible coupling rubber pads and coupling alignment. | | |
| 22. | Exhaust manifold | Inspect exhaust manifold and bellows. Replace parts if necessary. | | |
| 23. | Main Starting Valve | Inspect and renew worn parts. | | |
| 24. | Starting air distributor | Check function. | | |
| 25. | Engine foundation | Check flexible elements of engine foundation. | | |
| 26. | Engine foundation fastening bolts | Check tightening of engine foundation fastening bolts. | | |
| 27. | Mechanical over speed trip device | Check function of mechanical over speed trip device. Check engine tripping speed. | | |
| 28. | Electro-pneumatic over speed trip device | Check function and engine tripping speed. | | |
| 29. | Job completion | It is the responsibility of the contractor to complete all the activities not limited to the above necessary to put the engine in healthy running condition. | | |
| 30. | Start up | Start the engine and check all the safeties. Carry out load test & running in programme. Record operation data & plot performance curves. | | |

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|-----|----------------------|---|--|--|
| 31. | Vibration | Record engine vibration level. | | |
| 32. | 50 hours check | Carry out the 50 hours check. | | |
| 33. | Consumables & Meters | Supply of all the required Consumables and meters (Running hours meter, RPM meter, oil meter etc.) on the engine. | | |

ANNEXURE-III

Material to be supplied by the bidder

| Item No. | Part No. | Particulars | Old Part No. | Qty. |
|----------|------------|---------------------------|--------------|------|
| 1 | 3804300 | SET,LOWER ENGINE GASKET | | 1 |
| 2 | KIT4072225 | GASKET SET | 4072225 | 1 |
| 3 | 3006089 | LINER,CYLINDER | | 16 |
| 4 | KIT3880663 | PISTON & RING SET | 3880663 | 16 |
| 5 | 3879479 | VALVE,PISTON COOLING | | 8 |
| 6 | 206224 | PLUG,EXPANSION | | 14 |
| 7 | 206742 | PLUG,EXPANSION | | 16 |
| 8 | 205230 | BUSHING | | 34 |
| 9 | 132770 | BUSHING | | 2 |
| 10 | 130083 | BEARING,THRUST | | 6 |
| 11 | 3002126 | NUT,LOCK | | 8 |
| 12 | 3872333 | CONNECTION,WATER TRANSFER | | 2 |
| 13 | 3872334 | CONNECTION,WATER TRANSFER | | 4 |
| 14 | 3874218 | ASSY,FUEL BLOCK | | 2 |
| 15 | 3874153 | VALVE,CHECK | | 1 |
| 16 | AK 6009 SS | HOSE,FLEXIBLE | | 1 |
| 17 | AK 4010 SS | HOSE,FLEXIBLE | | 1 |
| 18 | 206709 | TUBE,WATER TRANSFER | | 14 |
| 19 | 3017961 | ROD,PUSH | | 16 |
| 20 | 3040710 | TUBE,WATER TRANSFER | | 1 |
| 21 | 3002956 | TUBE,WATER TRANSFER | | 1 |
| 22 | 135675 | THERMOSTAT | | 4 |
| 23 | 3037239 | SPACER,CRANKSHAFT | | 1 |
| 24 | 190397 | SLEEVE,WEAR | | 1 |
| 25 | 3237341 | TUBE,WATER BYPASS | | 1 |
| 26 | 3237343 | TUBE,WATER BYPASS | | 1 |
| 27 | 3874429 | BREATHER,CRANKCASE | | 2 |
| 28 | 3026395 | HOSE,PLAIN | | 4 |
| 29 | 43828 C | CLAMP,HOSE | | 8 |

| | | | | |
|----|---------|-----------------------------|---------|-----|
| 30 | 3877438 | HOSE,FLEXIBLE | | 2 |
| 31 | 43828 A | CLAMP,HOSE | | 4 |
| 32 | 3175267 | TUBE,WATER TRANSFER | | 2 |
| 33 | 3175528 | CONNECTION,ADAPTER | | 4 |
| 34 | 3175807 | BRACE,RETAINING | | 4 |
| 35 | 3016181 | SCREW,HEXAGON HEAD CAP | | 8 |
| 36 | 3016182 | NUT,LOCK | | 8 |
| 37 | 3166554 | ELEMENT,LUB OIL FILTER | | 4 |
| 38 | 206571 | DIPSTICK | | 1 |
| 39 | 107981 | CAP,FILLER | | 1 |
| 40 | 3043909 | BUSHING | | 16 |
| 41 | 3013266 | SCREW,CONNECTING ROD CAP | | 32 |
| 42 | 205126 | WASHER,PLAIN | | 32 |
| 43 | 3016825 | ROLLER,CAM FOLLOWER | | 16 |
| 44 | 3016826 | ROLLER,CAM FOLLOWER | | 32 |
| 45 | 4009247 | PIN,CAM FOLLOWER ROLLER | | 16 |
| 46 | 4009248 | PIN,CAM FOLLOWER ROLLER | | 32 |
| 47 | 205439 | RING,RETAINING | | 32 |
| 48 | 213559 | SOCKET,CAM FOLLOWER | | 48 |
| 49 | 3035110 | VALVE EXHAUST | | 64 |
| 50 | 3629006 | SPRING,VALVE | | 64 |
| 51 | 3201311 | GUIDE,VALVE STEM | | 64 |
| 52 | 205091 | COLLET,VALVE | 3201311 | 128 |
| 53 | 3086191 | INSERT,VALVE | | 32 |
| 54 | 3086192 | INSERT,VALVE | | 32 |
| 55 | 3001663 | GUIDE,VALVE SPRING | | 64 |
| 56 | 3009109 | PLATE,SWIRL | | 16 |
| 57 | 207344 | BUSHING | | 32 |
| 58 | 106339 | SEAL,OIL | | 1 |
| 59 | 114644 | SPACER,MOUNTING | | 1 |
| 60 | S 16073 | BEARING,BALL | | 1 |
| 61 | 3634049 | SHAFT,WATER PUMP | | 1 |
| 62 | 205548 | BUSHING | | 6 |
| 63 | 109319 | LOCKPLATE | | 5 |
| 64 | 175830 | PLUG,EXPANSION | | 4 |
| 65 | 3236310 | PLUG,EXPANSION | | 1 |
| 66 | S 16069 | BEARING,BALL | | 1 |
| 67 | S 16054 | BEARING,BALL | | 1 |
| 68 | 203131 | NUT,HEAVY HEXAGON | | 32 |
| 69 | 3089056 | SEAL,WATER PUMP | | 1 |
| 70 | 206457 | SEAL,O RING | | 1 |
| 71 | 206198 | SEAL,OIL | | 1 |
| 72 | 106339 | SEAL,OIL | | 1 |
| 73 | 3178947 | SCREW,HEXAGON HEAD CAP | | 16 |
| 74 | 3177760 | SCREW,HEXAGON HEAD CAP | | 10 |
| 75 | 3880282 | SHAFT,ACCESSORY DRIVE | | 1 |
| 76 | 3628639 | SHAFT,WATER PUMP | | 1 |
| 77 | 3057139 | ROD,PUSH | | 32 |
| 78 | 167157 | BALL,CHECK | | 16 |

| | | | | |
|-----|------------|---------------------------|---------|----|
| 79 | 3054999 | SCREEN,FILTER | | 16 |
| 80 | 173086 | GASKET,INJECTOR | | 16 |
| 81 | 3067897 | SCREW,TWELVE POINT CAP | | 1 |
| 82 | AR40133 | PLUNGER,GOVERNOR | | 1 |
| 83 | 3048182 | SEAL,O RING | | 1 |
| 84 | 3015665 | SHAFT,TACHOMETER DRIVE | | 1 |
| 85 | 203850 | UNION,MALE | | 1 |
| 86 | AR41043 | WEIGHT,CARRIER | | 1 |
| 87 | 212601 | SHAFT,FUEL PUMP DRIVE | | 1 |
| 88 | 212668 | KEY,SQUARE | | 1 |
| 89 | 212604 | RING,RETAINING | | 1 |
| 90 | 212613 | HUB,JAW COUPLING | | 1 |
| 91 | 212603 | SEAL,OIL | | 1 |
| 92 | 3046407 | SCREW,SOCKET SET | | 2 |
| 93 | 3030970 | DISC,VALVE | | 1 |
| 94 | S 1040 A | ELBOW,MALE ADAPTER | | 1 |
| 95 | 3178224 | GEAR & SHAFT | | 1 |
| 96 | 3178225 | GEAR & SHAFT | | 2 |
| 97 | 205438 | LOCKWIRE,TPT ROLLER PIN | | 48 |
| 98 | S 212 | NUT,REGULAR HEXAGON | | 48 |
| 99 | 168306 | SCREW,SLOTTED SET | | 48 |
| 100 | 207226 | BUSHING | | 16 |
| 101 | 3026556 | BEARING,THRUST | | 1 |
| 102 | 3026557 | BEARING,THRUST | | 1 |
| 103 | 116391 | BUSHING | | 1 |
| 104 | 205156 | BUSHING | | 2 |
| 105 | 193736 | SEAL,O RING | | 48 |
| 106 | 3018211 | SET MAIN BEARING (010) | | 1 |
| 107 | 3047391 | BEARING,CONNECTING ROD | | 32 |
| 108 | 3015464 | DAMPER,VIBRATION | | 1 |
| 109 | 3005973 | DAMPER,VIBRATION | | 1 |
| 110 | 3545647 | KIT,TURBO REPAIR HC5A | | 2 |
| 111 | 3408326 | ACTUATOR,ETR FUEL CONTROL | | 1 |
| 112 | 3234779 | ELBOW,MALE UNION | | 1 |
| 113 | 3034221 | PUMP,GEAR FUEL | | 1 |
| 114 | BM28854 | SHAFT, THROTTLE | | 1 |
| 115 | 3030970 | DISC,VALVE | | 1 |
| 116 | 3072817 | GASKET,FUEL PUMP | | 1 |
| 117 | KIT3880785 | KIT INJECTOR REPAIR-KTA | 3880785 | 16 |
| 118 | 4911703 | HARNES, WIRING | | 1 |
| 119 | 4954905 | SENSOR,TEMPERATURE | | 1 |
| 120 | 4055075 | SWITCH,PRESSURE | | 1 |
| 121 | 3627295 | CORE,COOLER | | 4 |
| 122 | AX1001866 | TRANSIT INSURANCE | | 1 |
| 123 | 3521034 | SHAFT & WHEEL | | 2 |
| 124 | 3635848 | PAN,OIL TLA | | 1 |

ALTERNATOR

| S.NO | Description | QTY |
|------|---|-----|
| 1 | IEVR-II (Electronic Voltage Regulator) | 1 |

ANNEXURE-V

Material to be supplied by BHEL as per the outcome of Joint Inspection

ENGINE

| | | | | |
|---|---------|--------------------------|---------|----|
| 1 | 3629189 | ASSY,CRANKSHAFT | 3804300 | 1 |
| 2 | 3066895 | CAMSHAFT | 3006299 | 1 |
| 3 | 3066894 | CAMSHAFT | 3006298 | 1 |
| 4 | 3881511 | HEAD,CYLINDER | 3240237 | 16 |
| 5 | 3594072 | TURBOCHARGER | 3524819 | 2 |
| 6 | 3032030 | CORE,AFTERCOOLER | | 1 |
| 7 | 3177103 | L O PUMP | 3177098 | 1 |
| 8 | 3632225 | ROD,ENGINE CONNECTING | 3626494 | 16 |

ALTERNATOR

| S.NO | Description | Qty |
|------|------------------------------|-----|
| 1 | Main Stator rewinding | 1 |
| 2 | Main Rotor rewinding | 1 |
| 3 | Exciter stator rewinding | 1 |
| 4 | Exciter rotor rewinding | 1 |
| 5 | DE & NDE bearing replacement | 1 |
| 6 | Rotating Rectifier Assy. | 1 |

Tender Notice No: M&S/P&C/2010/022 dt:26.11.2010

PRE QUALIFICATION

- I. The following conditions are to be satisfied by the tenderers, with documentary proof to be enclosed with technical bid. In case the agency fails to do so it is liable for rejection.
1. Registered / Reputed contractors are eligible, to tender for the work as per first para of NIT.
 2. Experience having successfully completed Electrical works / Similar works during last 7 years, ending last day of the month previous to the one in which applications are invited should be either of the following.

DEFINITION for experience (works) : PLEASE REFER IN PAGE 7

- a. Three similar completed works costing not less than the amount equal to 40% of the estimated cost.
OR
 - b. Two similar completed works costing not less than the amount equal to 50% of the estimated cost.
OR
 - c. One similar completed work costing not less than the amount equal to 80% of the estimated cost.
 3. **Average annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least 30% of the estimated cost, duly audited by practitioner chartered accountant to assess the financial solvency..**
 4. ESI code no. with proof of allotment.
 5. P.F.Code no. with proof of allotment.
 6. VAT No / TIN No. with proof of allotment / applied proof / to be submitted before commencement of work..
 7. PAN number with proof of allotment.
 8. If the contractor has not quoted the rate for the any item(s), it is considered as incomplete tender and tender can not be accepted.
 9. The contractor shall affix his signature at the end of each page of this tender documents (technical and price bids) .
 10. BHEL shall have the right to reject any tender based on past unsatisfactory performance.
 11. **The rates quoted for the item of work shall be exclusive of all Taxes and Duties levied by State / Central Government organization as well as Local authorities as applicable works contract Vat / Service Tax etc. The agency shall submit proper document evidencing the payment of applicable Tax / Duty based on which BHEL can avail credit. Other wise the payment to the contractor will be reduced to that extent.**
- II.(1) Tenders must be submitted in sealed covers addressed to Sr.DGM/M&S(P&C, telecom), BHEL, Ramachandrapuram, Hyderabad 502 032. Tenderer shall write Tender Notice No, and name of work and address of the tenderer on each sealed cover. In case the

agency fails to comply any of the above, the tender will be liable for rejection.

- (2) The agency is responsible for all the statutory requirements & documentations for ESI / PF etc as per prevailing Government Rules / Labour Rules. Any amount payable by BHEL on account of these requirements shall be recovered from contractors bills / deposits.

III. NOTES:-

1. Period of contract shall be 6 Months
2. Tenders are on two – part bid method (techno commercial bid and price bid).
3. Tender documents can be had through BHEL web-site <http://www.bhel.com>. Cost of document shall be paid in the shape of Demand Draft or Bankers Cheque or Pay Order and separately enclosed to the technical bid.
4. The requisitions for tender documents shall be addressed to Sr.DGM/M&S(P&C, telecom), BHEL, Ramachandrapuram, Hyderabad 502 032 along with Demand Draft/Banker's Cheque drawn in favour of "BHARAT HEAVY ELECTRICALS LIMITED, HYDERABAD" or payment of cash in BHEL Cash Office (No other Mode of payment will be accepted). Tender documents shall be collected in Person by the contractor or his authorized representative.
5. The agencies are advised to visit the work site to understand the nature of work / quantum or work in its true perspective to avoid any mis – under standing.
6. The tender documents may also be submitted through speed post or by post to reach within the stipulated date and time.
7. Tender bid with out EMD / Tender cost as stipulated are liable for rejection.
8. BHEL reserves the right to reject any or all tenders in part or in full without assigning any reasons.
9. The conclusion of contract will be in the form prescribed by BHEL for the purpose. A copy of the general conditions of contract applicable to the above works is available for perusal at the office of the Sr.DGM/M&S(P&C, telecom)If a copy of the same is required for record, the same will be issued separately at Rs.100/- per set.
11. A penalty of 0.5% of the gross value of work will be levied for every weeks delay in work subject to a maximum penalty of 10% of the gross value of work.

12. Those who are down-loading the tender documents from web-site must also pay cost of tender documents before last date of receipt. The DD's against Tender Cost / EMD are to be enclosed in technical bid cover.
13. Separate Covers (i.e.,)
- | | | |
|---------|---|--|
| Cover-A | - | for Technical Bid (sealed cover) |
| Cover-B | - | for Price Bid (sealed cover) |
| Cover-C | - | common cover for technical and price bid |
- are to be submitted, super scribing the name of work and NIT number on each over.
14. Tender will be finalised on lowest cost to BHEL based upon the unit rate in to quantity against each item. Thus arriving to total value of the tender along with applicable taxes and duties. Tenderers should quote unit rate for all the items. In case unit rate is not quoted for any / all items it will be treated as an incomplete offer and tender will be rejected.
15. A tender may be rejected while scrutiny of technical bids in case there is unsatisfactory past performance in the execution of an earlier contract.
16. The rates quoted by the contractor shall be inclusive of all taxes as applicable from time to time.



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDHRAPURAM : : HYDERABAD-32

TENDER DOCUMENTS (TECHNICAL BID)

Name of the work : **REPAIR of KIRLOSKAR CUMMINS MAKE DG SET 1000 KVA-2 Nos; MODEL KTA-3067-G SL NO 25159572,25157195 DG SET NO 2 & 7**

Tender Notice No. **M&S/P&C/2010/22 dt:26.11.2010, Item No. 01**

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BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM : : HYDERABAD-32

TENDER NOTICE

NIT No. M&S/P&C/2010/22 dt:26.11.2010, Item No: 01

1. Sealed Tenders will be received by the Sr.DGM/M&S(P&C, telecom), Bharat Heavy Electricals Limited, Ramachandrapuram, Hyderabad-32 at his office up to **11.00** hours on **21.12.2010** for the work of **REPAIR of KIRLOSKAR CUMMINS MAKE DG SET 1000 KVA- 2 Nos; MODEL KTA-3067-G SL NO 25159572,25157195 DG SET NO 2 & 7.** Ramachandrapuram, Hyderabad-502 032.A.P. Tenders (Technical bid) will be opened by the **Manager (M&S, P&C)**, Bharat Heavy Electricals Limited, Ramachandrapuram, Hyderabad-32. on the same day at 14.00 hours in vendor complex office adj to admn bldg reception office. The tenderers or their agents are expected to be present at the time of opening of the tenders. The tender receiving officer will, on opening such tender, attest over writings or corrections, if any, therein in the presence of the tenderer's who may be present at the time. The tender should be in the form of obtainable from the Office of the Sr.DGM/M&S(P&C, telecom). Tender forms and other particulars regarding the proposed work can be obtained on any working day from 09.00 to 14.00 hours upto **20.12.2010** on payments of the prescribe sum of **Rs. 500/-** per set as non-refundable.

2. Tenders must be submitted in sealed covers and should be addressed to the Sr.DGM/M&S(P&C, telecom), Bharat Heavy Electricals Limited, Ramachandrapuram, Hyderabad – 32, the name of the tenderer and the name of the work being displayed on the cover.

If the tender is made by a individual, it shall be signed with his name and his full address shall be given, If it is made by firm, it shall be signed with the co-partnership name by a member of the firm, who shall also sign his own name and the name and address of each member of the firm shall be given. If the tender is made by a corporation, it shall be signed by a duly authorized officer who shall produce with his tender, satisfactory evidence of his authorization. Such tendering corporation may be required before the agreement is executed, to furnish evidence of it's corporate existence.

3. Each tenderer must pay as **Earnest Money Deposit**, a sum of **Rs.100,000/-** and enclose with his tender the receipt endorsed accordingly. The Earnest Money prescribed for this work may be offered in any of the following forms duly pledged to the Sr. Accounts Officer (CASH), B.H.E.L., Ramachandrapuram, Hyderabad-32.

- a) Bankers cheque / Demand Draft.

The Earnest Money will be refunded to the unsuccessful tenderer after the intimation of rejection of the tender is sent. The Earnest Money will be retained in the case of the successful tenderer and get converted as a part of security Deposit for the due performance of the contract and in either case will not carry any interest. It will be dealt with as provided in the conditions attached to the tender.

When a tender is to be accepted, the tenderer whose tender is under consideration, shall attend the Office of Sr.DGM/M&S(P&C, telecom) upon written information to him. He shall forth with upon intimation being given to him by the Sr.DGM/M&S(P&C, telecom) of acceptance of his tender, complete the execution of the agreement by signing all documents connected there with, Failure to do so shall entail forfeiture of the Earnest Money Deposit.

4. EMD by the Tenderer will be forfeited as per Tender Document if.
 - i) After opening the tender, the bidder revokes his tender within the validity period or increase his quoted rates.
 - ii) The tenderer does not commence the work within the period as per LOI/Contract.

EMD shall not carry any interest.

If only a part of the work as shown in the tender is awarded, the amount of Earnest money will be forfeited with regard to the estimated cost of the work so awarded.

5. Tenderers shall persue carefully the instructions laid in General Conditions of the contract and all other relevant documents before tendering for the work. The approximate quantity of work to be executed under each class is given in Schedule – “A”. The quantities are given with a view to enable the tenderer to quote his over all rate in the tender form and for a uniform comparison of tenders. It shall be definitely understood that the Bharat Heavy Electricals Limited, does not accept any responsibility for correctness or completeness by commissions, deductions or additions at the discretion of accepting authority.

The Sr.DGM/M&S(P&C, telecom)reserves the right to reject any tender or part thereof or all the tenders with out assigning any reasons thereof.

7. Tenders not submitted in proper form will be rejected.

8. The offer shall be valid for a period of **90 days** from the date of opening of the tender.

9a. Security Deposit should be collected from the successful tenderer. 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 |

If the work is awarded, the agency has to pay 50% of SD in advance on contract value before commencement of work after adjusting of EMD amount.

9b. 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 such as National savings Certificates, Kisan Vikas Patras etc.
- v) Bank Guarantee from schedules 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 10% from the running bills. However in such cases at least 50% of the Security Deposit should be deposited before start of the work and the balance 50% will be recovered from the running bills.
- viii) EMD of the successfully tender shall be converted and adjusted against the security deposit.

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

9c. Security Deposit shall not be refundable to the contractor except in accordance with the terms of the contract.

The Security Deposit will be released after final bill release after completion of the work.

DIRECTIONS TO PARTIES FOR TENDERING

1. If at any time, B.H.E.L., supplies materials other than those specified in the agreement at the request of the contractor for use on work, they will be charged at the market value prevailing at the time of supply or issue rate plus 12 ½% whichever is greater.
2. Subsidiary items such as hire of tools and plants should be separately entered. If such items are not so entered, it will be assumed that the rates quoted, in the schedule include provision for them also.
3. The tenderer shall examine closely, the Andhra Pradesh Standard specifications and also the relevant clauses of the standard preliminary specification before submitting his tender unit rates which shall be for finished work in site. The contractor should purchase a book of Andhra Pradesh Standards Specifications for his references. He shall also carefully study the drawings and additional specifications and all the documents which form part of the agreement to be entered into by the accepted tenderer.
4. Each tenderer must quote the PAN no. with proof of allotment by the Income Tax Authority. In the case of proprietary firm, it will be necessary to quote the afore mentioned for the proprietor or proprietors and for each of the partners as the case may be.

5. Every tenderer is expected, before quoting his rates to inspect the site of the proposed work. He should also inspect the queries, and satisfy himself about the quality and availability of materials. Attention of the contractor is directed to standard preliminary specification regarding payment of seignior age, tools etc.,.
6. Time shall be considered as the essence of the contract. The rate of progress as mutually agreed to is required to be maintained. Date of commencement of this programme will be the date on which the site (or premises) is handed over to the contractor.
7. The tenderers are required to quote their tender value on unit rate and amount in the Schedule- Annexure-I. The schedule accompanying the tender shall be written legibly and free from erasures, over writings or corrections of figures. Corrections where unavoidable should be made by crossing out, initialing, dating and rewriting. No alterations which is made by the tenderer in the tender form, the conditions of agreement, the drawings or specifications accompanying the same will be recognized and if any such alterations are made, the tender will be void.

TENDER FOR THE WORK

I/We _____ do hereby tender to execute works of the under mentioned description and in accordance with the conditions noted below in consideration of payment being made for the quantity of work executed at the respective rates specified in the following schedule.

I / We hereby distinctly and expressly declare and acknowledge that before the submission of my / our tender I / We carefully followed the instructions in the tender notice and have read the Andhra Pradesh Standard specification and the clauses of the preliminary specifications and that I /We have made such examination of the contract documents and of the specifications etc., and of the location where the said work is to be done and such investigation of the work required to be done and in regard to the material required to be furnished as to enable me/us thoroughly to understand the intention of same and the requirements, covenants, agreements, stipulations and restrictions contained in the contract and in the said specifications and distinctly agree that I /We will not hereafter make any claim or demand upon the Bharat Heavy Electricals Limited based upon or arising out of the said requirements, covenants, agreements, stipulations, restrictions and conditions.

Price bid should be submitted in a sealed cover

ANNEXURE- I

PRICE BID

Work: Repair of 2 Nos 1000 KVA DG Sets

| S.No | Description | Total Amount (in Rupees) |
|------|---|--------------------------|
| 1. | Total Material cost from Annexure-III (unit price for each item shall be submitted along with price bid) | |
| 2. | Service Charges for Repair of Cummins make 2 X 1000 KVA Diesel Generator sets (Engine & Alternator) of KTA-3067 model as per the activities mentioned in Annexure-IV. | |
| 3 | Service Charges for 1000KVA DG set loading, unloading, shifting, refixing & commissioning after completion of overhauling | |
| | Free supplies by BHEL Aannexure- V | ----- |
| | Amount Rs (In figures) | |
| | Amount (In words Rupees) | |
| | Details of Taxes & Duties etc., In figures & in % | |
| | Transport charges to & fro charges | Rs |

***NOTE: DG set means Both Engine & Alternator, unless otherwise specified any where in this document.**

Bidder signature