Dated: 19/08/2024



### राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

### Tender Notice (Through GeM)

Ref: NITD/Maint/400&320 KVA DG set/KOEL/AMC01

Online GeMs are hereby invited from (a) Manufacturers/OEMs, (b) Specialized firms (c) Authorized sales, & Service dealers hereinafter referred as "Bidder" from Govt. /Semi Govt. /Quasi Govt./Autonomous bodies/Govt. Higher Educational Institutions in two cover system from Indian Nationals for Annual Maintenance Contract of Kirloskar Oil Engine Ltd. Make (KOEL Care) 03 Nos. of 400 KVA DG Sets & 01 No. 320 KVA DG Set, AMF, Synchronizing Panels and their allied equipment etc.

Bidders can download complete set of bidding documents from Institute website (<a href="https://nitdgp.ac.in">https://nitdgp.ac.in</a>) or from GeM Platform from 19/08/2024 onwards. Bidders need to submit the bids online for the interested items by uploading all the required documents on GeM only. Bids sent by FAX, email or offline mode will not be considered.

Last Date/ Time for receipt of bids through GeM is: .9/9/24. (03.00PM) (Server time). Late bids shall not be accepted. For further details regarding Tender Notification & Specifications please Visit website: https://eprocure.gov.in/eprocure/app and www.nitdgp.ac.in

### CRITICAL DATE SHEET

Published Date	19/08/2024
Bid Document Download Start Date	19/08/2024
Clarification Start Date	19/08/2024
Pre-bid meeting	26/08/2024
Clarification End Date	21/08/2024
Bid Submission Start Date	19/08/2024
Bid Submission End Date	09/09/2024
Bid Opening Date(Technical)	09/09/2024
Bid Opening Date (Price)	Will be announced after technical evaluation
The state of the s	

In case, the Bid Opening Date of the tender happens to be an unscheduled holiday, the tender will be opened on the NEXT WORKING DAY at the same time. Technical Bids shall be opened first and evaluated and the Financial Bid of only technically accepted Bidders will be opened, the date of which will be notified.

Note: \*Bidder should submit the EMD as specified in the tender. The EMD to be transferred ON-LINE only, receipt should be posted / couriered / deposit in person to the Tender Inviting Authority, within bid submission due date and time as indicated in the tender. Scanned copy of the instrument should be uploaded as part of the offer.

Any falsification/ suppression of information would lead to the cancellation of contract with forfeiture of Bank guarantee.

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-Roberty



### राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

Tender Document (Through GeM)			
Name of Work/ Service:	Annual Maintenance Contract of Kirloskar Oil Engine Ltd. Make (KOEL Care) 03 Nos. of 400 KVA DG Sets & 01 No. 320 KVA DG Set, AMF, Synchronizing Panels and their allied equipment etc.		
Tender Notification No:	As mentioned in GeM generated bid document		
Date:	19/08/2024		
Name of the Section;	Purchase & Store Section		
Estimated Cost	Rs. 4,85,446.00		
EMD Amount: ** (Online mode)	NIL		
Last Date & Time of submission of Tender:	09/09/2024		

ly) ON-LINE transfer \*\* EARNEST MONEY = NIL only. For small scale industries with certificate from NSIC/MSME the deposition of Earnest Money is exempted (subject to the submission of valid NSIC/MSME certificate). But there is No preference / exemption on Bid value and TOTAL Security Deposit EMD will be retained till the finalization of successful bidder.

ank details for online p Division/ Department (If any)	Name of Account Holder	Name of the Bank	Account Number	Branch/IFSC Code	MICR Code
NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR	NIT (DURGAPUR) SOCIETY	STATE BANK OF INDIA	11520034072	SBIN0002108	713002204

01.	Name of Work:	Annual Maintenance Contract of Kirloskar Oil Engine Ltd. Make (KOEL Care) 03 Nos. of 400 KVA DG Sets & 01 No. 320 KVA DG Set, AMF, Synchronizing Panels and their allied equipment etc.
02.	Estimated Cost	Rs. 4,85,446.00
-	and the same of th	NIL
03.	EMD	NIL
04.	Cost of Tender Document	09/09/2024 (Server time). Late bid shall not be excepted.
05.	Last Date and Time for submission of GeM	
06.	Date and Time of Opening of Technical Bid	3.30 PM on 09/09/2024 Venue: Stores and Purchase Section, National Institute of Technology Durgapur, Pin-713209)
	Of Feeting hid	After evaluation of technical bids, the date, time and place of opening
07.	Opening of Price bid	of the Price bid will be intimated to technically qualified bidders.
	Maintenance Period	1 year
08.	Maintenance remod	Place: Senate Hall, National Institute of Technology Durgapur -
09.	Pre-Bid schedule	713209 Date:

Name of the Agency	:
Submitting the Tender	;

### BID SUBMISSION FORM

### LETTER OF BID

Date:		
22000	_	

The Director National Institute of Technology Durgapur

Ref: Invitation for Bid No.

dt.

We, the undersigned, declare that:

- We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders.
- We offer to undertake the Comprehensive Annual Preventive Maintenance /breakdown maintenance Contract in respect of all the lifts as per the Bill of Quantities and other terms and conditions of Tender Documents and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- 3. If our bid is accepted, we commit to submit a performance security in accordance with the Bidding Documents.
- 4. We also declare that NIT Durgapur of India or any other NIT Durgapur body has not declared us ineligible or black listed us on charges of engaging in corrupt, fraudulent, collusive or coercive practices or any failure/lapses of serious nature.
- We also accept all the terms and conditions of this bidding document and undertake to abide by them, including the condition that you are not bound to accept lowest bid or any other bid that you may receive.

Yours sincerely,

Authorized Signatory
(Authorized person shall attached a copy of Authorization for signing on behalf of Bidding company)
Full Name and Designation
(To be printed on Bidder's letterhead)



### राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

### PRE-BID MEETING

Any modification of the bidding documents which may become necessary as a result of the Pre bid meeting shall be made known to all the prospective bidders by the Tender Committee through a notification of amendment in the website of NITD. No clarifications will be entertained beyond the date of pre bid meeting. No extension of time will be given for submission of tender on any account, beyond the last date for submission of tender. Bidders are advised to visit our website regularly.

### GENERAL TERMS AND CONDITIONS

**Duration of the Contract:** The contract is for a period of 1 year. The contract will be reviewed yearly, and may be extended for a maximum period of two more years, purely based on the discretion of NITD authority.

Vendors requested to make site survey before submitting the bid. The necessary services and spare replacement have to be carried out before taking over the AMC, if required.

Validity of the Schedule Price: 1 year

Termination of contract: This Contract may be terminated forthwith by either party by giving Two months' written notice to the other if:

 a. The other party is in material breach of its obligations under this Agreement and, in the case of such breaches capable of being remedied, fails to remedy that breach within thirty days of receiving notice of such breach;

OR

The Contract may be terminated forthwith by NITD by giving written notice to the Contractor, if:

b. In case of breach of any of terms and conditions of the Contract by the Contractor, the Competent Authority of NITD shall have the right to cancel the Contract and nothing will be payable by NITD and in that event and the security deposit in the form of performance Bank Guarantee shall be forfeited and encashed.

If the Contractor does not provide the required services satisfactorily as per the requirements of NITD or / and as per the Bill of Quantities / Schedule of Requirements. If the Contractor goes bankrupt and becomes insolvent.

c. The contract may be terminated before the expiry of contract period owing to deficiency in service or substandard quality of the service provided by the successful bidding Company/ Firm /Successful bidder. Further, NITD reserves the right to terminate contract at any time by giving two months (60 days) notice to the successful bidder.

Page 4 of 15

Subletting: The bidder shall not be allowed to transfer, assign, or sub-contract its rights and liabilities under this contract.

Registers: The bidder shall maintain and if necessary submit to the Institute for inspection on demand the records such as Stock, maintenance, attendance, Payment register etc. at site.

Breach of Contract: The bidder will be bound by the details furnished by them to NITD, while submitting the bid or at subsequent stage. In case, if, any of such document/s furnished by the firm is found to be false, it would amount to breach of terms of contract and the successful bidder is liable for legal action besides termination of contract.

The bidder shall ensure that the manpower / human resources deployed at NITD conform to the standards prescribed in the Tender Document.

Disciplinary action: In case, the manpower / personnel employed by the successful bidder commits any act of omission / commission that amounts to misconduct /indiscipline/ incompetence / security risks, the selected successful bidder shall take appropriate disciplinary action against such personnel immediately being brought to his notice by NITD, failing which it would amount to breach of contract and may lead to termination of contract.

Identity card: The bidder shall provide identity cards to the personnel deployed at the Institute having the photograph of the personnel and personal information such as name, designation, address and identification mark etc., attested by the Security Section of the Institute.

Confidentiality: The bidder shall ensure that any information related to Research, operational process, technical know-how, security arrangements, and administrative/organizational matters are not divulged or disclosed to any person by their personnel deployed at the Institute

The bidder shall ensure proper conduct of its personnel at Institute campus, and do not indulge in consumption of alcohol/ smoking, other banned items, activities while on duty.

Facility: NITD is not liable at any stage to provide accommodation, transport, food, medical, tools, equipment's, vehicles and any other requirement of their personnel and services to the Institute.

NITD reserves the right to amend or withdraw any of the terms and conditions contained in the Tender Document or to reject any or all tenders without giving notice or assigning any reason The Director, NITD is the final authority for settling any disputes and the decision of the Director in this regard shall be final and binding on all.

While all efforts have been made to avoid errors in the drafting of the tender documents, the Bidders are advised to check the same carefully. No claim on account of any errors detected in the tender documents shall be entertained after finalization of the contract. The date fixed for opening of bids, if subsequently declared as holiday by the NIT Durgapur, the revised date of schedule will be notified on our website. However, in

absence of such notification, the bids will be opened on next working date, the time and venue remaining unaltered.

8.4 A letter of authorization shall be submitted by the Bidder's representatives before opening of the Bids

8.5 Absence of bidder or their representative shall not impair the legality of the opening procedures.

### 1. Introduction:

The National Institute of Technology, Durgapur (NITD) is an autonomous Institute under the Ministry of Education (Shiksha Mantralaya), Govt. Of India. For the emergency power supply, in case of main electricity failure which is being supplied by DVC at 33/11 KV, a power houses with 3nos. 415Volt, 400 KVA capacity DG sets of Kirloskar make Acoustic type canopy has been installed along with its highly sophisticated electrical system, synchronizing panel and indication system for two DG sets installed at near Instruction Building sub-station and separate panel operation which were installed at near Ladies Hostel sub-station.

It is presumed that the agency i.e. M/S United Machineries Sales and Service has visited the sites and seen and under stood the complete work involved for each of the system.

### 2. Contract details:

- (i) Period of Contract One Year
- (ii) Foreclosure of contract due to abandonment or reduction in scope of work If at any time after acceptance of the tender, the Institute shall decide to abandon or reduce the scope of the works of any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Institute shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.
- (iii) Subletting -The contract shall not be assigned or sublet without the written approval of the Institute.

3. Security Deposit (10 %):

- i) Security Deposit (=10%). In that case, the total security money will be Performance Guarantee @ 3% and Security Money Deposit (SMD) @ 7%.
- ii) Security Money Deposit (SMD) @ 7% will be deducted from the running bill as security money, which will be refunded, free of interest, after one year from the date of completion of the contract and after deducting recoveries, if any.
- iii) Failure of the contractor to comply with the requirement of contract shall constitute sufficient grounds for the annulment of the awards and forfeiture of the security deposit that event the Institute may get done the work at the risk cost of the Contractor.
  - iv) Performance Guarantee is to be submitted within 15 days from the date of receipt of work order.

4. Payment: Quarterly

- i) The agency will submit bills duly supported with required documents etc. The Institute may make payment to the contractor within a reasonable time after receipt of the bills and after deduction of applicable taxes/TDS etc.
- ii) Levy/Taxes payable by the agency GST or any other tax on materials in respect of this contract shall be payable by the contractor and National Institute of Technology shall not entertain any claim whatsoever in this respect.

All quoted rates shall be inclusive of all taxes and levies payable under respective statutes and will remain firm throughout the tenure of the contract.

Comment

5. Resolution of Dispute:

All disputes arising out of this contract shall be referred to the sole arbitration of a person selected by the contractor out of the panel of three persons nominated by the Director, National Institute of Technology and his decision / award shall be final and binding on both parties. The Arbitration shall be governed under the Indian Arbitration Act 1996 or any statutory modifications or re-enactment thereof and rules made there under and for the time being in force shall apply to the arbitration proceeding under this contract.

### 6. Force Majeure:

- i) Notwithstanding the provisions stated above, the service provider shall not be liable for forfeiture of its security deposit, penalty or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of force majeure.
- ii) For purposes of this clause, "Force Majeure" means an event beyond the control of the service provider and not involving the agency's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the service provider either in its sovereign or contractual capacity, wars or revolutions fires, floods, epidemics, quarantine restrictions and freight embargoes.
- iii) If a Force Majeure situation arises, the agency shall promptly notify the NITD in writing of such conditions and the cause thereof. Unless otherwise directed by the employer in writing, the agency shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

### ANNEXURE-I

LIST OF MAJOR EQUIPMENT AND ITEMS CONSIDERED WITHIN THE PURVIEW OF THIS CONTRACT IS MENTIONED BELOW. ALL OTHER MINOR EQUIPMENTS CONNECTED WITH THESE MAJOR EQUIPMENTS WOULD BE THE PART OF SCOPE.

SI. No.	Description of equipment	Qty.
1	Silent Diesel Generating Set in Acoustic enclosure Kirloskar make Model No. BK15TA, , 494 HP at 1500 RPM Diesel Engine Couple with Kirloskar green make 400KVA, A.C. 3-Phase, 415Volt, 50Hz, 1500RPM Alternator etc.,	
2	Synchronizing Panel along with AMF panel and control for 400KVA*2nos. (Installed at IB Sub-station)	
3	EXIDE/AMARON lead acid Battery 2X12 V, 180 Ah including with Battery Charger Panel.	3 Set
4	Auxiliary Distribution Panel (415Volt)	2 Set
5	Generator Control Panels for Model No. 8K15TA diesel gen sets.	3 Set
6	900 Ltr. Diesel Tanks for Model No. 8K15TA DG sets.	3 Nos.
7	L & T Make, 800Amps, Draw out type ACB along with accessories etc.,	3 Nos
8	L & T Make, 1250Amps, Draw out type ACB along with accessories etc., etc.,	
9	Havells Make 1250 Amps, 415Valt ON-Load Changeover switch	1 Set
10	L & T Make 630 Amps, 415Volt ON-Load Changeover switch	1 Nos.
11	Silent Diesel Generating Set in Acoustic enclosure Kirloskar make Model No. KG1-320WS1 / 320kVA, 400 HP at 1500 RPM Diesel Engine Couple with Kirloskar green make 320KVA, A.C. 3-Phase, 415Volt, 50Hz, 1500RPM Alternator etc.,	
12	DG set Panel along with AMF panel and control for 320KVA*1No. (Installed at Academic Substation for 1500 seater New Auditorium)	
13	EXIDE lead acid Battery 2 X 12 V, 180 Ah Including with Battery Charger Panel.	1 Set
14	Auxiliary Distribution Panel (415Volt)	1 Set
15	Generator Control Panels for Model No. KG1-320WS1 diesel gen sets.	1 Set
16	Diesel Tanks for Model No. KG1-320WS1 DG sets.	1 No.
17	Legrand Make 500 Amps, 415Volt ON-Load Changeover switch	1 Set
18	Legrand Make 500 Amps, 415Volt MCCB	2 Nos.
19	All other interconnections viz. electrical, cabling, equipment and DG neutral earthing and other earthing, Piping, valves etc. to make the emergency power generation and supply up to the outgoing of the 415Volts panel switch board inside the DG Room and sub-station etc	
20	no I C. I Disching starting with main tools	4 Sets.

### ANNEXURE - II SCHEDULE OF MAINTENANCE FOR DG SET

SCOPE OF THE WORK: The maintenance includes preventive maintenance/regular services of
the Diesel Generators and all the accessories mentioned in the schedule for keeping the Diesel
Generators in perfect working order and condition at all the times during the period of the AMC.
Also for any unscheduled call for corrective and maintenance services, appropriate steps to be
taken in time to set right the full functioning of the Diesel Generators.

Work to be done quarterly: -

Check Lube oil, check fuel system, mounting bolts, fan belts, engine r.p.m., alternator voltage, coolant temperature, Lube oil pressure, air cleaner, all hose and clamp, primary and secondary element, LLOP operation, engine safety unit, cable connection and earthing of DG sets, check radiator cooling fins, clean the inter-cooler air fins and fuel strainer of fuel feed pump, drain the water in separator, PH and Nitrite content of coolant, check battery terminals and all external fasteners. Check Sp.Gr & electrolyte level in batteries, Checking and thorough testing of AMF panel Proper load sharing, Load balancing, Auto/manual operation, Current, voltage, r.p.m., Updating of software, if required. Etc.,

- Work to be done half yearly: (6 month or 250 Hrs. which is earlier)
  - Change air filter.
  - Change fuel filter.
  - Change oil filter.
  - Change Lube oil.
  - Change radiator coolant
  - Servicing of engine.
- Work to be done yearly:
  - Servicing of engine according to Kirloskar manual shall be done.
  - Measure earth resistance of earth pits (neutral and body grounding) and up to all major equipment and Check joints and continuity.
  - Record insulating resistance of power cables after meggering them.
  - Cleaning of cable trenches ducts pipe trench etc. and tightening of connections.
  - · Check thermostat element.
  - · Check valve clearance.
  - · Check injector.
  - Fuel tank cleaning.
  - Check exhaust silencer

### 2. EXPLANATION OF SCHEDULE

### i. Preventive Maintenance:

Number of Preventive Maintenance visit shall be i.e. Quarterly Visits per Annum and it includes the checking and ensuring proper functioning of followings. As per this contract Diesel Generators are to be maintained in proper running condition in all the time. It is the responsibility of the Contractor to provide all running spares mentioned below to ensure trouble free and continuous operation of the Generator sets. The spare includes:

Filter Washer, Radiator Cap, Radiator Hose, Hose clip, Fan belt, Diesel Tube, Bolt/Washer/union, Carbon brush /Holder, Battery Terminal/Clip, Diode with wire contact, Dynamo Terminal, Oil seal, Nozzle tube, Oil meter tube, Head Gasket, All Diesel/Lube oil/water tubes/hose, All Packing kits, Coolant oil, All Bolts & Nuts, Washers, etc, if required.



The preventive maintenance is to be carried out, to maintain the equipment in a proper operating condition. The service representative of the contractor shall visit and carry out preventive maintenance which includes the functional checks, necessary adjustments etc. The following works are to be carried out on a planned basis once in the quarterly. The AMC contract includes quarterly or breakdown calls periodical checks for all generators in addition to breakdown checks as and when call upon by NITD.

### A. Generator set:

- 1. Check the leaks, if any
- 2. Check the Engine Oil Level, top up if required.
- Check the condition of oil filter, and replacement when it required based on the condition and performance or else it has to be replaced once in 6 months.
- 4. Replace Engine oil once in six a month.
- 5. Check the bypass filter and clean it.

### B. Cooling System:

- 1. Check for water /coolant level & leakage if any and top up, if required
- 2. Clan the radiator with blower, if applicable
- Check all rubbers hose and clip for tightness and replace if found damaged. (rubbers hose and clip have to be supplied by agency, if required)
- Check the belt condition and tension, replace if required (Belt has to be supplied agency, if required)
- Check cooling fan hub, drive pulley, water pump and tighten all the accessible bolts and nuts.
- Add coolant in the radiator, if required.

### C. Air intake:

- 1. Check for air leakage and piping and its connection.
- Check the condition of air filter, and replacement when it required based on the condition and performance or else it has to be replaced once in a year.

### D. Fuel:

- 1. Check for any leakage.
- 2. Check for fuel lines and connection.
- 3. Check the fuel injection pump (PT Pump), Fuel injectors and Lube oil pump.
- Check the condition of fuel filter, and replacement when it required based on the condition and performance or else it has to be replaced once in 6 months.

### E. Exhaust

- 1. Check for any leakage.
- Check for exhaust restriction.
- Check the condition of the exhaust pipes and asbestos rope.

### F. Engine Related

- 1. Tighten all mounting hard wares.
- 2. Check the condition of coupling.
- 3. Clean the engine and surroundings.
- 4. Run the generator for half an hour and look for any unusual vibration/noise.

### G. Maintenance schedule for Alternator:

- 1. Check the Electrical connections of the alternator.
- Measure and record generator winding resistance once in six months.
- Checking the condition of carbon brushes, if required to be replaced. (Carbon brushes have to be supplied by contractor).
- 4. Check the wiring in the control panel.
- 5. Check the working of meters in control panel.
- 6. Check the AVR.
- Check the battery for water level, specific gravity and top-up if required with battery grade water.
- 8. Put the battery on boost charge for one hour if voltage is found low.
- 9. Run the generator with load and without load and record the following parameter.
  - i. Output Ac Voltage
  - ii. Load Current
  - iii. RPM (Speed of the Engine)
  - iv. Battery Voltage

The following works will be carried out by the contractor, if required:

- Draining the Lubricating oil from sumps, Lube oil cooler and cleaning Lube oil strainer.
- 2. Renew Lubricating oil prime Lubricating system.
- 3. Carry out air cleaner maintenance,
- Check and adjust tappet clearance.
- Check for irregularities i.e., abnormal speed, hot engine, engine knocking, high fuel consumption etc. Check and record engine performance parameters.
- 6. Check the engine protection unit for proper functioning
- Inspection and maintenance of electric AMF/manual control panel wiring etc.
- Any other related work required to keep the diesel engine driven generator sets in good running condition including proper working of hour meter.
- 9. All welding & tinkering works.

### ii. Breakdown maintenance

- This will include identifying and locating the fault(s) and carrying out the corrective Maintenance necessary to set right the Malfunctioning and to restore the complete System in operation, back to normal to the satisfaction of EIC of NIT Durgapur.
- Supply of consumables / spares and materials (as per ANNEXURE-III) which may be needed during Execution & completion of this work shall be arranged by the Contractor.

# 3. SERVICE REPORT:

Service Report shall be made for all visits and it shall contain

Status/Performance of the system	
Observation by Service Engineer	
Preventive/Breakdown Maintenance	
Name of the representative, witnessed date as directed by user	
Name of firms representative	
Date & Time of attention	
Date & Time of Complaint	1
Location/ID of Generators	

Recordings of all routine services:

Dalitary Volfacti	Dawely volumbe	
Print / Comment of	KrM (Speed of Engine)	
	Load Current	
	Output AC Voltage	
The second secon	Number of Service	
The second second	SI. No.	

# 4. SERVICE PROCEDURE:

- One contact number and Email-id should be assigned for breakdown calls.
- The contractor should arrange to paste a sticker which contains the following information:
  - i. Firm's Address with contact number. ii. Date of Last preventive maintenance.

### 5.RESPONSE TIME:

The contactor has to attend the breakdown calls within 24 hours after reporting of failure.

## 6.PENALTY CLAUSE:

If the contractor fails to attend the any minor failure of DG set FRS. 500/- per day after expiry of 48 hours after reporting of failure.

### ANNEXURE-III

- The agency will provide the following materials on each occasion (i.e. once every 6 months or 250 hours whichever is earlier) for 3 Nos. of 400 KVA D.G. Sets.
  - a) Lube Oil (K. Oil) (20 ltr.) --- 10 Nos
  - b) Lube Oil filters-6 Nos
  - c) Fuel filter assembly 6 No.
  - d) Fuel filter assembly pre 6 No.
  - e) Air cleaner primary element-6 Nos.
  - f) Air cleaner safety element -- 6 Nos.
  - g) K Cool super coolant (26 ltr.) --- 6 Nos.
- The agency will provide the following materials on each occasion (i.e. once in a year or 500 hours whichever is earlier) for 1 No. of 320 KVA D.G. Set.
  - a) Lube Oil (K. Oil) (50 ltr.) --- 1 Nos.
  - b) Lube Oil filters-1 Nos.
  - c) Fuel filter cartridge 2 Nos.
  - d) Spinon fuel filter assembly pre 1 No.
  - e) Air cleaner primary element-2 Nos.
  - Air cleaner safety element 2 Nos.
  - g) K Cool super coolant (26 ltr.) --- 2 Nos.
- 3) Schedule of repair/replacement of any spare parts which are not covered under AMC:
  - a) Radiator
  - b) Self-Starter
  - c) Charging Alternator
  - d) Fuel Injection system
  - e) Power alternator
  - f) Control Panel
  - g) Other electrical system
- 4) The agency will be supplied the sated materials & Consumables in point (1) & (2).
- Charges will be paid by NITD on items contained in point No (3) as above.



### ANNEXURE - IV TERMS & CONDITIONS

- The agency's representative will visit and work at NITD and will carry out maintenance of DG Set as per scope of work mentioned in Annexure-II. Each visit will take place within scheduled planned dates.
- 2) The agency should inform in advance about the visit of their service personnel.
- 3) During each visit, the agency's service representative will inspect the Engine and carry out preventive maintenance schedules and checks as required, provide all the required parts other than item no.1 of Annexure-III. In addition, the agency's service personnel will give their guidance to the operators, for the proper maintenance of the engine and to ensure its satisfactory performance.
- Service offered under this contract will be in accordance with the engine manufacturer's standard instructions/practice.
- 5) The agency shall also attend to any breakdowns/repair & complaint calls on urgent basis without any charges during the period of AMC. Visits of the agency's service representative will be acknowledged by the concerned officials of NITD signing his Field Service Reports on presentation.
- 6) The agency has to inform the requirement of spare parts and consumables (as mentioned in Annexure-III) sufficiently in advance for the 400 & 320 KVA DG sets. On receiving confirmation, the agency shall provide the same as per the price list of KOEL.
- 7) The firm shall be fully responsible for any liability/ compensation in case of any Accident or otherwise or any untoward incident at his own risk and cost for the staff deputed by firm and NITD shall not be required to give any compensation and NITD shall remain totally indemnified by the contractor.
  No advance payment will be made under any circumstances.
- 8) NITD will have the liberty to discontinue the contract any time by giving one month's notice without assigning any reasons. The agency's staff are required to follow NITD security norms strictly.
- 9) It must be ensured by the agency that no damage/ loss shall be caused to the properties of Institute by their act. In case it happens, they have to make it good as in the original conditions.
- 10) The agency shall at his own expense, conform to all anti-malarial/anti Covid-19 instructions given to him by the Employer including the filling up of any borrow pits which may have been dug by him. The above rules shall be incorporated in the contract. SOP containing latest COVID-19 protocol issued by Gol / GoWB / NITD.
- 11) In the event of any damage caused to the installation due to negligence, carelessness, or inefficiency of the staff, the contractor shall be responsible to make good the same. Decision of the NITD's engineer in charge shall be final and binding on the agency for carrying out suitable recovery.

Department shall not be responsible for any injury partial or permanent or death of any worker at site due to accident or any other seasons or by negligence of the staff. NITD will remain indemnified by the agency on this account.

- Rolling

V. 12 1 8 69.

### ANNEXURE-V (B.O.Q)

	(B.O.Q)		
SI. No.	Description of Item	Quantity	Unit
A	2 Nos. 400KVA (KOEL Make) DG sets Installed at IB Substation & 1 No. 400KVA Kirloskar DG set Installed at LH Substation		
1	Super Genuine Oil 20 litres Can	10	Each
2	Lube oil Filter Cartridge	6	Each
3	Fuel Filter Assembly	6	Each
4	Fuel PRE Filter Assembly	6	Each
5	Air Cleaner Primary Element	6	Each
6	Air Cleaner Safety Element	6	Each
7	Genuine Coolant Premix 26 litres Can	6	Each
В	No. 320KVA (KOEL Make) DG set Installed At Academic Building substation for 1500 seated Auditorium.		
1	Premium Genuine Oil 50 Litres can	1	Each
2	Lube oil filter	1	Each
3	Fuel Filter Cartridge	2	Each
4	Spinon Fuel Filter Assembly	1	Each
5	Air Cleaner Primary Element	2	Each
6	Air Cleaner Safety Element	2	Each
7	Coolant Premix 26 Litres Can	2	Each
	Total Rs (A+B)		
c	Service Charge - (Per Quarter Per DG) for 4 Nos DG sets (3 Nos. 400 KVA & 1 No. 320KVA DG Set) and Including un limited Breakdown call, if any.  (4 Nos. DG set X 4=16 Nos)	16	Each

