

Tender Document for Supply and installation of 30KVA DG SET For

MGU Innovation Foundation (MGUIF)

1.	Tender No	MGUIF/PUR/01/2024-25 (supply and installation of 30 KVA DG Set)
2.	Cost of Bid Document	Rs.600.00/- (Rupees Six Hundred Only + GST (Non-Transferable and non-Refundable)
3.	Earnest Money Deposit (EMD)	Rs. 3500/- (Rupees Three Thousand Five Hundred Only)
4.	Tender publishing date	15-05-2024
5.	Last Date of Receipt of the Tender	27-05-2024 up to 5:30 PM
6.	Date of Opening Technical Bid	28-05-2024 at 11:00 AM
7.	Mode of Submission of Bid	The Tender details and documents can be viewed & downloaded by login into https://etenders.kerala.gov.in .
8.	Address	The Chairman, MG Innovation Foundation, Mahatma Gandhi University, Kottayam, Kerala-686560.
9.	Contact Person	Contact Mob: 9778429535 (CTOMGUIF), Purchase MGUIF 8078010009

1. Project Brief:

MGU Innovation Foundation invites e tender for supply and installation of 30 KVA DG Set as per the attached technical specifications and it is to be connected to MGUIF Main UPS MSB Panel of 20 KVA and remaining 10 KVA to Air-condition Power DB of HPC LAB.

This Tender is under **two bid system** and this consists of two parts. **Part-A is Technical Bid and Part-B is Commercial/Price Bid.** Vendors whose Technical Solutions are found acceptable will only be considered for evaluation of their commercial/price bids and subsequent placement of order.

TECHNICAL SPECIFICATION 30 KVA DG SET SPECIFICATION

Supply, installation, Cable laying, testing, and commissioning of 30KVA, 24KW, 415V/240V, 3Phase 4 Wire, power factor 0.89 lag, 50 Hz DG set, Radiator cooled with alternator AC Output complete with AMF/ATS Panel, exhaust system, all filter and AUTO battery charger and location of DG Set with sound proof acoustic enclose with canopy MS fabricated base frame with AVM pads. and Earth pit, with All other basic accessories etc.

Diesel Engine, Alternator, AMF/ATS panel Specification

Engine /Alternator Kirloskar / Kirloskar Electric / Crompton Greaves/Cummins/ – Alternator – Stamford/KEC/Jyoti			
Fuel Tank Capacity	~150 litres		
Standby Power	33kVA / 22KW		
	30kVA / 24KW, BHP-42		
	Battery charging alternator with maintenance-free battery		
	MICO In-Line fuel system with mechanical governor		
	Dual spin-on filter		
	Lube oil filter		
D' D	Dry-type air cleaner		
Prime Power	Recovery bottle		
	Shut-off coil with safeties for LLOP/HWT/Overspeed		
	Flywheel and flywheel housing		
	Duty: Prime		
	Power Factor: 0.85 (lagging)		
	Frequency (Hz) and RPM: 50 Hz, 1500 RPM		
	Engine Power (hp): 38.5		
	Alternator confirming to BS 5000/IS 4722. The alternator is brushless type, screen protected, revolving field, self-excited, self-regulated through an AVR		

Engine Required Power for Rated kVA (hp): 38.1	
Cooling: Liquid Cooled	
Aspiration: Turbocharged, Charge Air Cooled	
No. of cylinders: 4 In-line	
Bore (mm) x Stroke (mm): 95 x 127 (approx.)	
Compression ratio: 18.3:1 (approx.)	
Displacement (litre): 2.7 (approx.)	
Fuel: High-Speed Diesel	
Fuel consumption @75% load with radiator and fan* (litre/hr):	
Fuel consumption @100% load with radiator and fan* (litre/hr)	
Starting system: 12 V DC Electrical	
Lube oil specification: pls specify	
Lube oil sump capacity, High-Low level (litre)	
Total lubrication system capacity (litre): 8 (approx.)	
Lube oil consumption @ full load** (litre/hr)	
Total coolant capacity (litre): – pls specify	
Exhaust pipe size (inch): – pls specify	
Alternator Enclosure: IP23s	
Alternator Voltage regulation (Max.): ±1%	
Alternator Class of Insulation: H Class	
Alternator Winding Pitch: 2/3	
Alternator Stator Winding: Double layer lap	
Alternator Rotor: Dynamically Balanced	
Alternator Waveform distortion/ Total Harmonic Distortion: No l $<1.5~\%,$ Non distorting balanced linear load $<5~\%$	oac
Alternator Maximum Unbalanced Load across phases: Less that equal to 25%	1 01
Alternator Telephonic Harmonic factor: <2%	
Automatic Genset start/stop	
Automatic battery charger and Battery charging alternator	
Emergency stop	

	AMF (Automatic Mains Fault)
	Remote control
Function of control	Microprocessor-based design
panel	LED alarm indication and Sound alarm
1	Generator voltage: Uab, Ubc, Uca
	Generator current: Ua, Ub, Uc
	Generator temp.: °C/°F both display
	Generator frequency: Hz
	Generator power: kW, kVA, kWh, kVAr, kVArh, kVAh
	Generator starts count: 999999 times (Max)
	Generator pressure: kPa/Psi/Bar both display
	Charging Voltage: V
	Battery Voltage: V DC
	Over / Under Speed Alarm and Shutdown
Display of the con-	Start / Stop Failure Alarm
troller	Over Current Alarm and Shutdown
	Under / Over Generator Voltage Alarm and Shutdown
	Low Oil Pressure Alarm and Shutdown
	High Engine Temperature Alarm and Shutdown
	Over Load Alarm and Shutdown
	Low and High Battery Voltage Alarm
Protection of Diesel	
Generator	Lose of Speed Signal Alarm and Shutdown
	Charge Fail Alarm
	4Pole 100A Power Contactor and MCCB for MAINS E3 supply

	4Pole 100A Power Contactor and MCCB for ALTERNATOR (DG power supply)
	Supply and Laying of cable -DG to ATS panel 2run 50sqmm or required as per site need
	3.5C Arm Al. Cable (required meter)
ATS panel	
7115 paner	Reverse power relay
	Mains and DG supply voltage sensing relay
	Emergency stop push button D power ON indication for DG & EB

2. Scope of Work:

Supply and installation of 30 KVA DG Set as per the attached technical specifications and to be connected with MGUIF Main UPS MSB Panel of 20 KVA and the remaining 10 KVA to Air-condition Power DB of HPC LAB with concrete base of required dimension. Training to the MGU Innovation Foundation team on managing and troubleshooting the above equipment/product.

3. Documents required along with the technical bid.

The bidder shall ensure to submit the following details in their bid. Submission of items mentioned mandatory shall lead to rejection of the bid

- 1) Name, Make, Model, and detailed technical specification of product) (Mandatory).
- 2) Tender document duly stamped and signed by the Bidder.
- 3) Technical compliance statement (Mandatory).
- 4) Brochure and data sheets.
- 5) Authorization letter from the OEM (MAF) (Mandatory)
- 6) Documents for EMD exemption if applicable (Mandatory).
- 7) Affidavit certifying that Bidder, Promoter(s), Director(s), Partners of organization are not blacklisted.
- 8) The Technical Compliance sheet should be attached.

4. EMD/Tender fee exemption

- a) Earnest Money Deposit (EMD) is exempted in the following cases. If the tenderer comes in any of the following category, they should upload the scan copy of the relevant certificate counter signed by the tenderer in technical bid for EMD exemption.
- b) Micro, Small & Medium enterprises registered with the National Small Industries Corporation Limited, New Delhi and in respect of which competency certificates are issued by the Corporation will be exempted from payment of EMD.
- c) Kerala State Small Industries Development Corporation Ltd when it participates in tender on behalf of Small-Scale Units will be exempted from furnishing EMD.

5. Special Conditions:

- 1. The Quoted price should be inclusive of with price Supply and installation of a 30 KVA DG Set as per the attached technical specifications and it is to be connected to MGUIF Main UPS MSB Panel of 20 KVA and the remaining 10 KVA to Air-condition Power DB of HPC LAB at MG Innovation Foundation. The price should be in Indian Rupee only (INR). Prices/quotations in currencies other than INR shall be summarily rejected.
- 2. The rate quoted shall be inclusive of all taxes.
- 3. The validity of the quote should be 90 days from the date of opening tender.
- 4. The items supplied, against the tender must strictly comply with the specifications mentioned in the tender. If there is any variation of the product supplied the same must be replaced.
- 5. MG Innovation Foundation has the right to make any changes in their requirements or to change any specifications, at any time. The same will be published as a corrigendum.
- 6. The assurance of quality, time-bound supply, delivery, installation, and training of the products/execution of works at the customer site will be the sole responsibility of the bidder.
- 7. The Quoted price should be inclusive of transportation, loading unloading, installation, training etc.
- 8. If any of the Product/Service by the bidder is not found acceptable to the MG Innovation Foundation has the complete right to reject the Products/ Service without giving any compensation.
- 9. MG Innovation Foundation has the right to disqualify any vendor/Bidder if they fail to provide the necessary clarifications or documents.
- 10. The Earnest Money Deposit will not bear any interest.
- 11. The decision of MG Innovation Foundation, all matters will be final and conclusive.
- 12. OEM/Bidder has to give detailed training on administration and troubleshooting of the supplied products to the nominated persons of at their cost.

4. Eligibility Criteria for Bidder

- 1. The Tenderer/Bidder must be a Government Organization/PSU/PSE/Public Limited Company/Private Limited Company of repute under Indian Laws. The bidder should be in existence for a minimum period of 5 years, bidder should have been actively engaged in the field and shall have operation in Kerala.
- 2. Average Annual turnover of the bidder should be a minimum 25 Lakhs during the last three financial years. (CA-certified financial statement proof to be attached).
- 3. Should have experience in similar projects or work order.
- 4. Any Government / Government agency / Banks / Financial Institutions in India should not have blacklisted the Bidder during the last 3 years. Self-declaration to that effect should be submitted along with the technical bid.
- 5. The bidder should submit valid letter from all the OEMs (MAF) (whose products are being quoted) confirming the following.
- 6. The firm must possess valid GST Tax Registration Certificate & Income Tax / PAN number. (Copies of all the above certificates should be submitted along with the Tender). Bidder without the same shall be summarily rejected.
- 7. Bidder should have the following ISO certifications, ISO 9001, 20000 / 27001 is desirable.
- 8. Detailed design drawings must be furnished with the bid.

MG Innovation Foundation, Mahatma Gandhi University Campus

Mob: 8078010009 (Purchase MGUIF)

Phone no. 0481-2731066 (10.30AM to 4.30PM)

Email. purchase@mguif.com

Note: Bidder must provide necessary supporting documents as proof in respect of the eligibility criteria mentioned above.

Payments:

Normal payment terms acceptable to the Institute shall be 75% of payment against delivery of the materials and 20% of satisfactory installation, testing, and commissioning of the equipment & training and the rest 5% payment will be released against the submission of **performance security** in the form of bank guarantee of the same amount.

Site visit

Every Tenderer/ Bidder is expected to inspect the site, and conduct a site survey, to understand the requirement, at his own cost before quoting. The bidder must also go through all the terms and conditions as stipulated in the documents. It will be construed that the Vendor has inspected the site, conducted the required site survey and satisfied himself about the requirements, site conditions, availability of materials and other relevant matters and the quoted rates shall hold

good in all conditions. Warranty minimum one year with the capability of providing onsite service of a minimum 5 years

Sd/-

Chairman & Managing Director MGUIF

DETAILS OF THE BIDDER

No.	Clarification sought	Details to be furnished
	Name of the authorized signatory Contact Address	
1	Email Address: Telephone No. Mobile No.	
2	Type of company/organization (please tick)	Private Limited Company Public limited Company Others (specify)
3	Year of Incorporation:	
4	Has the company/organization ever been black-listed by Govt. of India, if No , please attach a self-deceleration	
5	Annual turnover during the financial years: attach proof	Year Amount (in lakhs) 2021-22 2022-23
6	Confirm whether the company/organization is a systems integrator with proven skills and experience in designing, setting up, operating and maintaining quoted items. Please attach the completion certificate as a proof for expertise	2023-24
7	Number of similar projects executed during last 3 years:	Value Number Year Not less than 5 lakhs Not less than 20 lakhs
8	Total number of above projects executed during last 3 financial years and the total value of these projects	No. of Projects: Value :
9	Number of qualified technical personnel	Kerala
10	Confirm whether company/organization has local support facility at Kerala (please tick)	☐ YES □ NO □

11	Whether the Bidder is authorized by the OEM to participate in this Tender? Attach Proof	YES □ NO	
12	Confirm whether company/organization has registered office in Kerala. Furnish Certificate of Registration in Kerala.	YES □ NO	
	[Note: Please attach documentary proof in support wherever necessary, duly signed by the authorized sig		furnished above,

Date:

(Signature of Authorized Signatory)