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BU/MDO/RIDFXXIX/0114

Date:25.04.2025

Request to Conduct Reverse Auction for SIC of DG Set

The Bhagirathi Cooperative Milk Producers' Union Limited Invites Tender/ Reverse Auction for procurement installation and commissioning of **58.5 KVA Diesel Generator Set (DG) with Acoustic Enclosure** as per specification terms and conditions mentioned hereunder in two bid system:

Scope of Work	Supply Installation and Commissioning of 58.5 KVA Diesel Generator Set (DG) with Acoustic Enclosure.
Bid Inviting Authority	The Managing Director of The Bhagirathi Cooperative Milk Producers' Union Limited
EMD	20,000/-
Technical Bid Documents to be furnished by bidder	 The Company must be an authorized supplier or Service provider of Kirloskar / Escorts / Cummins /Eicher /Mahindra / Caterpillar. Authorization certificate must be submitted.
	2. All Certificate and Industrial safety certificate must be provided. The certificates should be valid on the last date of submission of bid and should remain valid during the tenure of the contract period if work is awarded.
	3. Company declaration of a minimum of 5 years of work experience in supply, Commissioning and delivery of 20 No. of 58.5 KVA in factory/Industry. (Work order and Completion certificate must be provided)
	4. Bidders have to submit OEM Certificate pertaining to this bid.
	5. Minimum Turnover of Rs 2 crores. Audited Balance Sheet of previous three consecutive financial years. Companies with decreasing turnover shall not be considered.
	6. Income Tax Return of previous three consecutive financial years.
	7. Participating company must have sales & service office in West Bengal, India. Name and address of the same must be uploaded.
	8. PAN CARD and GSTIN (GST Registration Certificate)
	9. Technical Details of Quoted DG Set as per ANNEXURE-I.
	10. AFFIDAVIT as per ANNEXURE-II
	11. The Company which are blacklisted by our organization, any organization or by NDDB are not eligible to bid otherwise, bid will



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not be accepted and EMD may be forfeited. Even an order issued to such a bidder may get cancelled.
12. The technical team of BCMPUL may inspect the required infrastructure available with the bidder before finalization of the tender.

General Terms and conditions:

- 1. During evaluation the Milk Union may summon any bidder and seek clarification/information regarding bids within the stipulated time frame. In case the bidders fail to clarify any query during the stipulated time frame the bid shall be liable for rejection.
- 2. **Bid Validity:** The rate once quoted in this tender shall remain valid for a period of 180 days from the date of Financial Bid Evaluation. Bidders are therefore required to assess their rates before quoting them.
- 3. The Milk Union may reject any bid from any party with unsatisfactory performance with the Milk Union or any other Milk Union in the past.
- 4. **Price:** Price consists of the cost of the equipment along with installation and commissioning of the unit along with trial run and satisfactory operational training of the entire unit with one year of comprehensive warranty along with all taxes and levies. All components and consumables required in testing and commissioning must be taken into account by the bidder before quoting the rates.
- 5. **Payment**: Payment shall be released in 3 phases in NEFT/RTGS to the Bank Account of the supplier after submission of 3 copies of invoice along with documents mentioned in Documentation clause which are as follows:
 - a. **First Phase**: 70% payment shall be released after receipt of the material in good condition. Transit Insurance shall be the responsibility of the supplier. Goods unless received by the Milk Union shall be the responsibility of the supplier and no claim in this regard shall be entertained.
 - b. **Second Phase**: 20% payment shall be released after 1 month of successful installation and commissioning of the entire Unit certified by the Concerned Official and approved by the Competent Authority. EMD shall also be released after receipt of an intimation in writing from the supplier.
 - c. Third Phase: 10% payment shall be released after 1 month of submission of equivalent amount bank guarantee valid for a period of 1 year. This shall serve as Performance Guarantee. In case the party fails to provide maintenance and support as per the requirement of the Milk Union or is found to act in a way which jeopardizes the operations of the Milk Union, the Performance Bank Guarantee shall be forfeited after giving a Notice to the supplier in writing and the supplier shall be debarred from participating into any tender in future.
- 6. Bidders are required to go through the Tender Documents understand the requirement the location of the installation and commissioning and then quote their rate. Rate once quoted by the bidder shall be deemed to be quoted by the bidder after understanding the requirements of the Milk Union. Rates once quoted are final and no alteration in rate shall be allowed.



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- 7. Bidders are required to go through the Tender Documents understand the requirement the location of the installation and commissioning and then quote their rate. Rate once quoted by the bidder shall be deemed to be quoted by the bidder after understanding the requirements of the Milk Union. Rates once quoted are final and no alteration in rate shall be allowed.
- 8. **Safety Permission and Test Run:** Bidder has to obtain safety permission on the behalf of the Bhagirathi Cooperative Milk Producers' Union Limited from the Directorate of Electricity, Govt. of West Bengal. Diesel and other consumables required for Test run shall be provided by the supplier at his own cost.
- 9. After Sales Service: The Bidders must have local arrangements (within the District of the Milk Union) for 'prompt after sale service' of the installed unit as and when required within warranty period free of cost. The service must be attended within 24 hours from receipt of the information. The Milk Union can provide room for service arrangements.
- 10. Warranty: 24 months from the date of commissioning. If material supplied is found to be having manufacturing defect. It should be replaced by the bidder within 7 days.
- 11. **Warranty Extension**: If any major equipment has been down for more than 10 days in a year, warranty would be extended by one Month. 2. If any major equipment has been down for more than 30 days warranty would be extended by one Year.
- 12. Service/Repair in Warranty period: Call logged regarding Service or Repair other than preventive maintenance during Service period must be attended and resolved within 24 hrs. If the call is not responded due to reasons attributable by the bidder, then a penalty of Rs. 2000/-shall be charged per day and the amount shall be deducted from the Performance Guarantee available to the Milk Union.
- 13. **Maintenance**: Two number of preventive maintenance visits offered in a year during warranty period (Supply of all consumables is the buyer's responsibility). Timely Servicing / rectification of defects during warranty period after having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 3 days' time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG).Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to re-imburse the cost of such service / rectification to the Buyer.
- 14. **Insurance:** The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. If the equipment's is not commissioned and handed over to The Bhagirathi Co- Operative Milk Producers Union Ltd. within specified period, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to The Bhagirathi Co-operative Milk Producers' Union Ltd.
- 15. **Penal Measure**: Time being the essence of the contract, failure to supply the materials within due time or delay in installation and commissioning of the materials shall invite penalty.



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- I. Liquidated damages of 0.5% per day subject to a maximum of 10% of the total cost of materials shall be charged if goods are not delivered installed or commissioned in time and the amount will be deducted from the Security Deposit and bills submitted by the supplier.
- II. For violation of any terms and conditions of the contract the Bhagirathi Milk Union reserves the right to cancel the contract without assigning any reason thereof. On termination of Contract the Security Deposit will be forfeited and the resultant loss shall be recovered from the company. The subsequent company will be blacklisted for 3 years.
- 16. Loading and unloading of goods is the responsibility of the supplier. If the Milk Union makes its own arrangement for the unloading of the materials the respective cost of the same shall be deducted from the bidder.
- 17. **Documentation**: Complete documentation like principal warranty papers, operation manuals, document of technical specifications and guarantee cards have to be furnished by the supplier. Failure to submit any of the above document in hard copies at the time of supply of the materials shall lead to non-acceptance of the material.
- 18. **Delivery, Installation and Commissioning:** The materials must be delivered installed and commissioned in the vicinity of the Village Level Cooperatives of Murshidabad district in West Bengal. The installation and commissioning of the unit must be completed within 60 days from the acceptance of the Purchase Order. It is critically important to coordinate with the Milk Union before dispatch of materials.
- 19. **Inspection:** DG after delivery is subject to inspection before acceptance. If rejected due to any defect, deficiency transit damage or wrong supply, the report of our inspector in this respect shall be final and no correspondence on the subject would be entertained. The rejected goods should be removed from our premises by the Supplier within 15 days after receipt of our inspection report.
- 20. **Standards**: The Goods supplied under this Agreement shall conform to the standards mentioned in the Technical Specifications and when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods to the latest Indian Standards.
- 21. **Registration of Goods:** If required under the Applicable Law, goods supplied under the Agreement shall be registered for use in India.
- 22. **Patent Rights:** The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.
- 23. **Packing:** The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Purchase Order.
- 24. **Termination for Default**: The Purchaser, without prejudice to any other remedy for breach of the Agreement, by written notice of default sent to the Supplier, may terminate this Agreement in whole or in part: a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Purchase Order, or within any extension thereof granted by the Purchaser; or b) If the Goods do not meet the Technical Specifications or registration requirement (if any) stated in the Agreement; or c) If the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, in competing for or in executing the Agreement; or d) If the Supplier fails to perform any other obligation(s) under the Agreement.



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- 25. **Termination for Insolvency**: The Purchaser may at any time terminate the Agreement by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent
- 26. **Termination for Convenience**: The Purchase, by written notice sent to the Supplier, may terminate the Agreement or the Purchase Order, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Agreement or Purchase Order is terminated, and the date upon which such termination becomes effective. The Goods that are already supplied before the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the terms and prices described in the Agreement and the Purchaser order.
- 27. Dispute Resolution Any dispute arising out of the Agreement, which cannot be amicably settled between the parties, shall be referred to adjudication/arbitration in accordance with the Arbitration and Conciliation Act of 1996 of India. The venue of adjudication/arbitration shall be Kolkata. The language of arbitration shall be English.
- 28. Applicable Law: The Agreement shall be interpreted in accordance with the laws of Union of India.
- 29. Force Majeure: If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) neither party shall have any claim for damages against other in respect of such non-performance or delay in performance
- 30. The undersigned reserves the right to accept or reject any tenders and to cancel the entire tender process without assigning any reason whatsoever.

Sd/-Managing Director The Bhagirathi Cooperative Milk Producers' Union Limited



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ANNEXURE-I

Detailed Specifications for 58.5 KVA Diesel Generator Set (DG) with Acoustic Enclosure

The Diesel Generator Set (DG) to be procured should meet the following specifications:

1. Engine Specifications:

- Engine Type: Water-cooled, 4-Stroke, Diesel Engine
- Engine Make: Kirloskar / Escorts / Cummins /Eicher /Mahindra / Caterpillar.
- Power Output: Minimum 72.7 BHP at 1500RPM
- No. of Cylinders: 4 or 6 cylinders (as per the manufacturer's design for 58.5 KVA capacity)
- Engine RPM: 1500 RPM (Standard for 50 Hz operation)
- Ambient Conditions: NTP (Normal Temperature and pressure)
- Standards: BS: 5514 or equivalent in IS
- Bore and Stroke: 98 x 122 mm or 104 x 113 mm
- Cooling System: Liquid-cooled, radiator and fan
- Air Filter: Dry type, with replaceable element
- Lubrication System: Closed loop, Full-pressure lubrication system with oil filter
- Fuel Consumption: 14.1 to 15.3 L/hr
- Engine Enclosure: Enclosed to ensure silent operation within permissible noise level as per CPCB norms
- The governing system of the diesel engine shall satisfy the following requirements:
 - Steady state speed regulation shall be adjustable between 0 to 5% manually
 - Steady state speed regulation once fixed, shall not vary beyond +5%.
 - Transient speed regulation shall not exceed 5% of rated speed.
 - Recovery time shall be within 30 seconds.
- Instrument Control Panel shall be furnished for the engine, which shall comprise the following: Push Button Water temp. gauge Hour meter with rpm indicator Lube oil pressure gauge Other item as considered necessary by manufacturer The Instrument Control Panel shall preferably be mounted on the Diesel Generator skid. Otherwise, it may be of separately pedestal /floor mounted type.
- For fuel oil of the engine, one day tank to hold minimum eight hours oil requirement for full load running of the engine along with fuel oil filter, level indicator and float switch shall be provided. The fuel system of the engine shall be complete with suction line, fuel filters, fuel pump, governor, manifold, injectors etc. as required.
- Engine shall meet the following parameters:

- The Engine shall be enclosed in an enclosure to make it work silently (within permissible noise level as per CPCB norms) without any degradation in its performance.

- The fuel shall be used High Speed Diesel (HSD) as per IS: 1460.

- Filter shall be dry type air filter with replaceable elements.

- The Engine shall have closed loop lubricating system. No moving parts shall require lubrication by hand prior to the start of engine or while it is in operation.

- The Engine shall be electric starting (by 12V DC starter motor system for 58.5 KVA DG Set).

- The engine shall be fitted with Mechanical Governor.



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2. Alternator (Generator) Specifications:

- Type: Self-excited
- Alternator Make: Stamford / Kirloskar / Escorts / Cummins /Eicher /Mahindra / Caterpillar.
- Voltage: 415 V solidly grounded
- Voltage Regulator: Solid State Electronic type.
- Voltage Regulation: $\pm 1\%$ in static conditions.
- Rated Output: 58.5 KVA
- Frequency: 50 Hz
- **Power Factor**: 0.8 (Lagging)
- **Phase**: Three-Phase
- Insulation Class: Class "H" insulation or better
- Speed: 1500 RPM
- Cooling: Self-cooling
- Connection: Star, with neutral terminal wired to external bushing.
- Rated Current: 87 Amp.
- **Protection**: IP23 (Drip proof, screen protected)
- Excitation System: Brushless, Self-Excited
- Overload Capability: 10% for 1 hour in 12 hours of operation
- **Suitable for:** Tropical climate (as per IS:4722)

3. Control Panel:

The Control panel shall be designed for automatic on mains failure operation of the generator set. The panel shall be floor standing cubicle pattern, totally enclosed, dust, damp and vermin proof, fabricated out of 16 SWG. M.S. sheet treated with anti- corrosion and painted with two coats of approved quality shade synthetic enamel paint. The panel shall be complete with inter connections, insulators, 2 Nos. earthing lugs and shall incorporate the following:

- CT operated Digital Multifunction meter with remote monitoring facility.
- Mode Selector Switch OFF/AUTO/MANUAL
- Set of current transformers of suitable ratio
- Built-in boost cum trickle Battery Charger consisting of
 - a) Transformer/Rectifier
 - b) DC Ammeter
 - c) DC Voltmeter
 - d) Charging rate selector switch
 - e) Hooter
- Type: Free-standing, floor-mounted, metal clad cubicle type
- Protection Rating: IP-53 (dust/damp and vermin proof)
- Sheet Steel Thickness: Minimum 1.6 mm (for cold rolled steel)
- Base Plate Thickness: Minimum 1.6 mm
- Devices for Control, Protection & Metering: Contactor, Push buttons, Indication lamps, etc.
- **Protective Devices**: Overcurrent relay, Over/under voltage relay, Over/under frequency relay
- Protective Relay Make: AREVA (or suitable controller)
- Controller Features: Lube oil pressure low
 - Cooling water temp. high
 - Engine tripped due to over-speed



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- Generator tripped due to electrical faults
- Low oil level in fuel service tank
- Engine failure to start
- Other items as per manufacturer
- Metering: 3-phase current, 3-phase voltage, 3-phase kW, 3-phase KVA, KWh, Power factor and System frequency
- Starting Battery Type: Lead acid
- Nominal Voltage of Battery: 12 V DC
- **Battery Capacity:** Minimum 100 AH
- Battery Mounting: Inside the Acoustic Enclosure
- Battery Charger Type: SMPS-based
- Charging System: Automatic float and boost charging
- Input Voltage for Charger: 230V 1 phase, 50 Hz or 415V 3 phase, 50 Hz
- Charger Capacity: Adequate to restore the fully discharged battery in 12 hours
- Functions:
 - o Low oil pressure shutdown
 - High temperature shutdown
 - Low coolant level alarm
 - Frequency and voltage monitoring
 - Engine safety alarms and protections
 - HMI (Human-Machine Interface) with digital display for parameters (Voltage, Current, Frequency, Engine Hours, etc.)
 - Push-button controls for manual operation
 - Communication options (RS485/Modbus for remote monitoring, optional)

4. Fuel System:

- Fuel Type: High Speed Diesel (HSD) as per IS: 1460
- Fuel Tank:
 - o Capacity: Minimum [200-300 liters], sufficient for 8 Hours of operation at full load
 - Material: Mild Steel or equivalent
 - Construction: Tank with baffles for stability and fitted with a fuel gauge
- Fuel Filter: Primary and secondary fuel filters
- Fuel Tank Components: Fuel level indicator, Float switch.
- Fuel Components: Suction line, Fuel filters, Fuel pump, Governor, Manifold, Injector

5. Starting System:

- Starting Type: Electric Start
- Battery: 12V, Minimum 100 Ah (Adequate for 12 hours of standby operation)
- Battery Charger: Automatic Battery Charger for maintenance-free operation
- Starting Voltage: 12V DC

6. Exhaust System:

- Exhaust Silencer: Factory-fitted, silent exhaust system compliant with noise level standards
- Exhaust Type: Horizontal / Vertical (As per site requirement)



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• Noise Level: Compliance with relevant noise regulation (Typically below 75 dBA at 1 meter from the DG set)

7. Electrical Protection & Safety Features:

- **Overload Protection**: Circuit breakers and fuses
- Under/Over Voltage Protection: Provided in the control panel
- Over Speed Protection: Engine protection system with over-speed shutdown
- Short Circuit Protection: Provided for safety during faults
- Grounding: Proper earthing system to avoid electric shock hazards

8. Sound Proof Enclosure:

This is a special sheet metal fabricated on CNC machine and Powder coated. The enclosure is designed for reducing the sound level to 75 dB (A) (average) all round in green field, as per IS: 8528 Part 10 as per approved CPCB II norms.

The Acoustic enclosure consists of the following: -

- Acoustic Insulation: Insulated and noise reduction type, properly clamped shall be provided on all doors, roof and sides to absorb noise.
- Door Locks and Door Hinges: Special designed Stainless steel Door Locks and doors hinges ensuring for smooth operation and long life.
- Residential Silencer: Absorption type non-resistance Residential Silencer insulated from inside with glass wool shall be provided to suppress exhaust noise from the engine

9. Structural Design:

- **Frame**: Heavy-duty welded steel base frame
- Vibration Isolation: Anti-vibration mounts between the engine, alternator, and base frame

10. Base Frame:

- The DG set complete with its accessories shall be mounted on a common base frame.
- In case the manufacturer recommends vibration isolators for the installation of the equipment, the same shall be included in their scope, in required quantities.
- AVM Pads as per engine manufacturer standard shall be provided with each DG Set.

11. Warranty:

- Warranty Period: 24 months from date of commissioning.
- Warranty Extension:
 - If any major equipment has been down for more than 10 days in a year, warranty would be extended by one Month.
 - If any major equipment has been down for more than 30 days warranty would be extended by one Year

12. Additional Features:

- Site Survey: Pre-installation site survey to ensure proper installation conditions and technical support
- **Installation Kit**: Complete with all necessary accessories for installation, including battery cables, terminals, nuts, bolts, and fastener



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- Engine, Alternator, battery and controller must be of same make.
- Remote monitoring system to monitor engine is required & the same must be from engine manufacture only.
- SFC should not be more than 216.00 g/kw-hr
- Shelf life of the DG Set should be 10 years.

13. Testing & Commissioning:

Factory Testing

First one Hour at 100% load

2nd hour 110% load the fuel consumption shall be measured at 100% load. The DG set shall remain liable for rejection, if the actual fuel consumption calculated exceed 5% of the committed value. All other parameters shall be tested as per relevant IS. The contractor shall provide all the consumables like fuel, lubricant (including one initial charge) necessary for this testing. On completion of the test, necessary test- report shall be furnished.

The following tests are to be carried out for the AMF panel and necessary certificates be submitted by the contractor before dispatch of the panel to the site. Insulation resistance test with 1000 V megger with all switchgear in closed position.

• Phase-to-Phase 2.5 MEG. OHMS (Minimum)

• Phase-to-Neutral 1.5 MEG. OHMS (Minimum)

Meters and relay calibrated and tested through secondary injection tests. Site Testing – at site, after successful installation of DG set, the vendor must run the DG set for 2 hours at full load, during which proper functioning with all required parameters shall be tested. On completion of test, necessary test report shall be furnished. (Diesel to be supplied by the Supplier).

Diesel generator (DG) with higher or equivalent specifications shall also be accepted.

Sd/-Managing Director The Bhagirathi Cooperative Milk Producers' Union Limited

Signature of I/C Maintenance

Copy forwarded to:

1. NCDFI for publication of Reverse Auction Notice



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<u>Annexure – II</u>

AFFIDAVIT

(To be furnished in a Twenty Rupees Non-Judicial Stamp Paper duly certified by Notary Public)

- 1. I/We the undersigned solemnly declare that all the statements made in the documents, records etc., attached with this application are true and correct to the best of my/our knowledge.
- 2. I/We the undersigned do hereby certify that neither my/our firm/company nor any of its constituent partners have abandoned any work/works of similar nature and magnitude in India, in the past.
- 3. I/We the undersigned do hereby certify that any of the contracts awarded to me/us has not been terminated rescinded, due to breach of contract on my/our part in the past.
- 4. I/We the undersigned authorize (s) and request any bank / person / firm / corporation / Government Departments to furnish pertinent information deemed necessary and requested by The Bhagirathi Cooperative Milk Producers' Union Ltd. to verify the statement made by me/us or to assess my/our competence and general reputation.
- 5. I/We the undersigned, understand(s) that further qualifying information / clarifications on the statement made by me / us may be requested by The Bhagirathi Cooperative Milk Producers' Union Ltd and agree(s) to furnish such information/clarification within SEVEN Days from the date of receipt of such request from The Bhagirathi Cooperative Milk Producers' Union Ltd.

6. I/We agreed to execute a formal Agreement embodying the terms & conditions of the said online tender and the General Terms & Conditions.

Dated Signature of Applicant with Seal:

To be signed by the officer authorized by the Firm/Company to sign on behalf, the Firm/Company with company's seal)

Note: In case of sole proprietary concern, affidavit should be signed only by the sole proprietor.

(Title of the Officer) (Title of the firm/Company) (Date)

The above-named deponent has understood the contents well and solemnly and sincerely declared and affirmed by the deponent in my presence at.....and signed before me on this day of...... (Seal).

(Signature of the Notary Public)