



**The Bhagirathi Co-op. Milk Producers' Union Ltd.**  
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Dated: 29.12.2022

### **NOTICE INVITING TENDER**

The Bhagirathi Cooperative Milk Producers' Union Limited invites Online Tender (E-Tender) in two bid system from well Original Equipment Manufacturers or their authorized agencies for supply, installation and commissioning of 500 KVA Diesel Generator Set at Feeder Dairy Campus, Bhagirathi, Panchanantala Berhampore, Murshidabad.

#### **IMPORTANT DATE AND TIME SCHEDULE**

Sl. No.	Particulars	Date & Time
1	Date of uploading (Publishing)of N.I.T. Documents (Online)	29.12.2022 at 1500 hrs
2	Documents download start date (Online)	29.12.2022 from 1505 hrs
3	Technical Bid proposal submission start date (Online)	29.12.2022 from 1510 hrs
4	Bid Submission end date (Online)	14.01.2023 till 1500 hrs
5	Technical bid opening date	16.01.2023 at 1500 hrs
6	Pre bid Meeting	02.01.2023 at 1100 hrs
7	Financial Bid Opening date	To be notified later

**The details of work are given below:**

<b>Nature of Work</b>	Supply Installation and Commissioning of 500 KVA Diesel Generator Set
<b>Scope of Work</b>	Supply Installation and Commissioning of 500 KVA Diesel Generator Set
<b>Estimated Cost of Work</b>	50 lakhs
<b>Bid Inviting Authority</b>	The Managing Director of The Bhagirathi Cooperative Milk Producers' Union Limited
<b>Statutory &amp; Non Statutory Documents</b>	<ol style="list-style-type: none"><li>1. Company profile which consists of MOA &amp;AOA. Declaration that the Company is operational for more than 5 years.</li><li>2. OEM Certificate pursuant to this tender.</li><li>3. GSTIN (GST Registration Certificate).</li><li>4. PAN CARD.</li><li>5. Minimum Turnover of Rs 2 crores. Audited Balance Sheet of previous three consecutive financial years.</li><li>6. Income Tax Return of previous three consecutive financial years.</li><li>7. COPY OF AFFIDAVIT as per ANNEXURE-I DULY SIGNED &amp; SEALED AND NOTARIZED BY THE BIDDER.</li></ol>

	<p>8. Company declaration of minimum 5 years of Work Experience in supply installation and commissioning of at least 20 no(s) 500 KVA DG SET in factories/industry (Work Order or Completion Certificate must be uploaded in support of the declaration).</p> <p>9. Participating company must have sales &amp; service office in West Bengal, India. Name and address of the same must be uploaded.</p> <p>10. Declaration that the company is not blacklisted by any organization.</p> <p>11. Technical Details of Quoted DG Set as per <b>ANNEXURE-II</b></p>
<p><b>Earnest Money Deposit</b></p>	<p>The EMD amounting to Rs. 1,00,000/- should be deposited online through Net Banking, NEFT/RTGS in favour of The Bhagirathi Cooperative Milk Producers' Union Limited payable at Berhampore. EMD shall not carry interest.</p> <p>Tenderers will select the Tender to bid and initiate payment of pre-defined EMD for that tender by selecting from either of the following payments modes (vide Finance Department Memorandum no. 3975-F(Y) Dt. 28/07/2016) :</p> <ol style="list-style-type: none"> <li>1. Net banking (any of the banks listed in the ICICI Bank Payment gateway) in case of payment through ICICI Bank Payment Gateway.</li> <li>2. RTGS/NEFT in case of offline payment through bank accounts in any Bank.</li> </ol> <p><b>Payment procedure.</b></p> <p><b>a) Payment by Net Banking (any listed bank) through ICICI Bank Payment Gateway :</b></p> <ol style="list-style-type: none"> <li>1. On selection of net banking as the payment mode, the bidder will be directed to ICICI Bank Payment Gateway webpage (along with a string containing a Unique ID) where he will select the Bank through which he wants to do the transaction.</li> <li>2. Bidder will make the payment after entering his Unique ID and password of the bank to process the transaction.</li> <li>3. Bidder will receive a confirmation message regarding success/failure of the transaction.</li> <li>4. If the transaction is successful, the amount paid by the bidder will get credited in the respective Pooling account of The Bhagirathi Cooperative Milk Producers' Union Limited maintained with the Focal Point Branch of ICICI Bank at R.N. Mukherjee Road, Kolkata for collection of EMD/Tender Fees.</li> <li>5. For transaction failure, the bidder will again try for payment by going back to the first step.</li> </ol>

**b) Payment through RTGS/NEFT:**

1. On selection of RTGS/NEFT as the payment mode, the e-Procurement portal will show a pre-filled challan having the details to process RTGS/NEFT transaction.
2. The bidder will print the challan and use the pre-filled information to make RTGS/NEFT payment using his Bank account.
3. Once payment is made, the bidder will come back to the e-Procurement portal after expiry of a reasonable time to enable the NEFT/RTGS process to complete, in order to verify the payment made and continue the bidding process.
4. If verification is successful, the fund will get credited to the respective Pooling account of The Bhagirathi Cooperative Milk Producers' Union Limited maintained with the Focal Point Branch of ICICI Bank at R.N. Mukherjee Road for collection of EMD/Tender Fees.
5. Hereafter, the bidder will go to e-Procurement portal for submission of his bid.
6. But if the payment verification is unsuccessful, the amount will be returned to the bidder's account.

**B. Refund/Settlement Process:**

- i. After opening of the bids and technical evaluation of the same by the Quotation inviting authority through electronic processing in the e-Procurement portal of the State Government, the Quotation inviting authority will declare the status of the bids as successful or unsuccessful which will be made available, along with the details of the unsuccessful bidders, to ICICI Bank by the e-Procurement portal through web services.
- ii. On receipt of the information from the e-Procurement portal, the Bank will refund, through an automated process, the EMD of the bidders disqualified at the technical evaluation to the respective bidders' bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on rejection of bid is uploaded to the e-Procurement portal by the Tender inviting authority.
- iii. Once the financial bid evaluation is electronically processed in the e-Procurement portal, EMD of the technically qualified bidders other than that of the L1 and L2 bidders will be refunded, through an automated process, to the respective bidders' bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on rejection of financial bid is uploaded to the e-Procurement portal by the

	<p>Quotation inviting authority. However, the L2 bidder should not be rejected till the LOI process is successful.</p> <p>iv. If the L1 bidder accepts the LOI and the same is processed electronically in the e-Procurement portal, EMD of the L2 bidder will be refunded through an automated process, to his bank account from which he made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on Award of Contract (AOC) to the L1 bidder is uploaded to the e-Procurement portal by the tender inviting authority.</p> <p>v. As soon as the L1 bidder is awarded the contract (AOC) and the same is processed electronically in the e-Procurement portal –</p> <p>a) EMD of the L1 bidder for tenders of State Government offices will automatically get transferred from the pooling account to the State Government deposit head “8443-00-103-001-07” through GRIPS along with the bank particulars of the L1 bidder.</p> <p>b) EMD of the L1 bidder for tenders of the State PSUs/Autonomous Bodies/Local Bodies/PRIs, etc. will automatically get transferred from the pooling account to their respective linked bank accounts along with the bank particulars of the L1 bidder.</p> <p>In both the above cases, such transfer will take place within T+1 Bank Working Days where T will mean the date on which the Award of Contract (AOC) is issued.</p> <p>vi. The Bank will share the details of the GRN No. generated on successful entry in GRIPS with the E-Procurement portal for updation.</p> <p>vii. Once the EMD of the L1 bidder is transferred in the manner mentioned above, Tender fees, if any, deposited by the bidders will be transferred electronically from the pooling account to the Government revenue receipt head “0070-60-800-013-27” through GRIPS for Government tenders and to the respective linked bank accounts for State PSU/Autonomous Body/Local Body/PRIs, etc tenders.</p> <p>viii. All refunds will be made mandatorily to the Bank A/c from which the payment of EMD &amp; Tender Fees (if any) were initiated.</p>
<p>Technical Bid Evaluation</p>	<p>The Technical Bid will be evaluated by the Tender Committee. Bidders shall upload all the necessary documents in the Technical Folder which will be verified and evaluated by the Tender Committee.</p>
<p>Financial Bid</p>	<p>Rate shall be quoted in the Financial bid</p> <p>The bidder shall quote the rate online through Computer only in the space marked for quoting rate in the Bill of Quantities (BOQ). Only downloaded copies of the above documents, digitally signed by the bidder are to be uploaded (Excel file).</p> <p>The rate quoted per unit item by the tenderer shall be inclusive of all elements of taxes and duties, demands, tolls etc. The tenderer shall include income tax, GST etc as applicable, octroi if any and all other charges if applicable while quoting the rate, FOR (freight on road) delivery of the material in the place of delivery installation and commissioning.</p>
<p>Validity of Bid</p>	<p>180 days</p>

E Tender registration and bidding	<b>ONLINE BID SUBMISSION:</b> The bidders are required to submit the Technical and Financial bid documents ONLINE i.e. uploading of the documents complete in all respect by following the Online Bid submission procedure.
<b>Award of Contract</b>	The bidder selected after evaluation of financial bid by the tender committee will be given Award of Contract, subject to fulfillment of Terms and Conditions provided in the tender.
<b>Publication of Tender</b>	<ol style="list-style-type: none"> <li>1. E-Procurement Portal Govt. of West Bengal (<a href="https://wbtenders.gov.in">https://wbtenders.gov.in</a>)</li> <li>2. Website of the Milk Union (<a href="http://www.bhagirathimilk.com">www.bhagirathimilk.com</a> )</li> <li>3. Office Notice Board</li> </ol>

## **TECHNICAL SPECIFICATION 500 KVA Diesel Generator Set**

415V Volts, three phases, 500 KVA Prime Rated, 1500 RPM, with inbuilt Radiator Cooled DG set with AMF panel, acoustic enclosure, power and control cables, batteries, battery charger and associated accessories.

### **1. DIESEL ENGINE**

- a) The diesel engines shall be of the direct injection with Radiator cooled, turbo charged operating at a nominal speed of 1500 RPM and engine output shall be not less than 437 KW at 100 per cent load and coupled to 500 KVA Alternator.
- b) The engine shall meet the current emission norms.
- c) The engine fitments shall include but not be limited to the following: - 1.0 Flexible coupling/Close Coupled alternator and flywheel.
  - Dry type air filter with clogged condition indicator (The filter shall be easily approachable for maintenance).
  - Radiator inbuilt in the common skid base frame and Engine suitable to run the DG set at 10% overload at an ambient of 50 Degrees centigrade, keeping the acoustic doors in closed condition.
  - Engine driven fuel pump.
  - Engine driven coolant pump.
  - Engine driven lubricant Lube oil pump, oil cooler and filter. Also, first fill of oil and coolant need to be supplied.
  - Silencers with Hospital Grade.
  - 12/24 V D.C. Starter and battery charging alternator.
  - Microprocessor based monitoring and control system capable of operator interface to the DG set manually and remote start/stop control and shut down fault indication shall be of electronic LCD type displaying Engine and Alternator parameters, compatible for BMS Integration through' RS485.
  - The fuel consumption should be as detailed below.
  - 100% load = less than 111.64 liters per hour
  - 75% load = less than 85.48 liters per hour
  - 50% load = = less than 55.82 liters per hour

Tenderers may indicate the fuel consumption at above loads

- Daily fuel service tank as per the CPCB with minimum 990 liters capacity (standard tank fabricated from M.S. sheet with inlet, outlet connections air vent tap, drain plug and level indicator (gauge) M.S. fuel piping from tank to engine with valves, unions, reducers, flexible hose connections and floor mounting pedestals, twin fuel filters and fuel injectors. The location of the tank depends on standards manufacturing design.
- d) The engine speed shall be regulated through Electronic Governing system which shall also provide the over speed protection. The AVR should have adjustable V/Hz feature to adjust and obtain best possible block loading capacity.
- e) The generator sets shall have the following protection features in built in Controller

### **Engine Safety Features and Protection**

Low Oil Pressure Warning  
High Coolant Temperature Warning  
Low Coolant Level (Warning or Shut Down)  
Low Oil Pressure Warning  
High Coolant Temperature Shut Down  
Fail to Crank Shut Down  
Cranking Lockout  
Over speed Shut Down  
Emergency Stop Shut Down  
Fault Log for at least Last 5 Faults  
Weak Battery Warning

### **Electrical Safety Features and Protection**

High AC Voltage Protection  
Low AC Voltage Protection  
Under Frequency Protection  
Loss of Excitation  
Weak Battery Monitoring Feature

### **Engine Safety Features**

Battery Voltage Monitoring  
Coolant Temperature Monitoring  
Low Lube Oil Pressure Safety  
High Engine Speed Safety  
Engine Run Hours

### **Fault Codes Display**

- a) Programmable Isochronous or drop governing
- b) ability High Coolant Temperature (Trip/Alarm)
- c) Over Speed (Trip / Alarm)
- d) Low Lubricant Oil Pressure (Trip)
- e) Low Coolant Level (Trip / Alarm)
- f) Battery Charging failure

## **Starter Motor Protection**

Automatic Speed Dependent Starter disengagement on startup.

ENGINE ACCESSORIES: The following accessories shall be supplied with the DG set.

- a. Common base frame for the Engine, alternator & radiator.
- b. Anti-vibration mounts of reputed make of requisite quantity to be provided between Engine and base frame and Alternator & Base frame.
- c. Protective guards for all rotating parts is compulsory.

## **Battery**

- a. Battery shall be as per manufacturer's standard suitable for three successive starting attempts each of 10 seconds duration with a gap of 5 seconds between successive starts. The AH of batteries shall be as recommended by manufacturer.
- b. Batteries shall be maintenance free type with pure Lead-Tin Plate (LTP) technology and casing should be fire retardant.
- c. Batteries shall be supplied and provided with automatic charger of suitable capacity to charge batteries.

## **2 ALTERNATOR**

The Alternator should be horizontal foot mounted, single/double bearing, self-excited, self – regulated, brush-less, screen protected drip proof, continuous duty alternator conforming to IS 4722/IEC34/IS 4889 as amended up to date with Class "H" insulation IP-23 enclosure incorporating the following:

- a) Continuous damper winding.
- b) AVR to be part of the alternator.
- c) Terminal box with both ends of each phase winding brought to terminals.
- d) Single bearing/Double Bearing
- e) Rated Power factor: 0.8(lag)
- f) Rated voltage: 415 Volts
- g) Rated frequency: 50Hz
- h) No. of phases: 3
- i) Enclosure: SPDP
- j) Degree of protection: IP-23
- k) Ventilation: self-ventilated air cooled
- l) Ambient temperature: 40 °c maximum
- m) Insulation class: F/H
- n) Temperature rise: within class F/H limits rated loads
- o) Voltage regulation: + 1%
- p) Voltage variation: +5%
- q) Overload duration/capacity: 10% for one hour in every 12 hours continuous use

- r) Frequency variation: as defined by Engine Governor (+/-1%)
- s) Type of AVR: Electronic
- t) Type of bearings and lubrication
- u) Arrangement: Anti-friction bearings with grease lubrication

Following control system should be available for the Generator set

1. Local or remote start and stop
2. Control Switch: OFF/RUN/AUTO MODE
3. LED INDICATING LAMPS for indicating the following status a. Not in Auto Mode b. Common wiring c. Shutdown d. Remote start command
4. Panel Lamp switch
5. Fault Reset Switch
6. Emergency stop Switch

Following Metering & Protections are required for the DG set. Digital Meters Indication for the following:

Engine Parameters:

1. Lubricant Oil Pressure
2. Coolant temperature
3. Engine Speed
4. Engine Hours Run
5. Battery Voltage

Alternator Parameters:

1. Phase voltage LL
2. Parallel bus voltage
3. Phase current LL
4. Frequency
5. Total and per phase KVA
6. Alternator exciter duty and governor duty

Protections:

Engine:

1. Low Lubricant oil pressure (Warning (W)/Shutdown (SD))
2. High coolant temperature (W/SD)
3. Low coolant temperature - W
4. Low coolant level - W/SD
5. Oil pressure sender - W
6. Engine temperature sender - W
7. Fail to crank - SD
8. Over crank - SD
9. Over speed - SD
10. Low and high battery voltage - W
11. Weak battery - W
12. Dead Battery - SD
13. Magnetic pick up failure - SD

Alternator:



1. Over voltage - SD
2. Under voltage - SD
3. Under frequency - SD
4. Over frequency - W/SD
5. Loss of excitation-SD

Local Isolation on Engine standard control Panel: 800 Amp MCCB, 50 KA rating shall be provided.

#### Specification of Acoustic Enclosure

- i. Construction of Acoustic Enclosure Acoustic enclosure shall be powder coated and fabricated out of minimum 1.6 mm thickness CRCA sheet. The silent canopy shall be of nut bolt type construction. Powder coating is done after surface treatment process of sheet metal. Canopy panel and doors shall have inside lining of Fire Retardant Foam as acoustic material. Hinged doors shall be provided to canopy, one door shall have glass window for control panel.
- ii. Surface Treatment-Painting The enclosure surface is pretreated with 11 tank processes and thereafter they are coated with high quality powder and are baked in uniform temperature in conveyor oven.
- iii. Base Frame The Base frame is rugged in construction and designed for mounting engine and alternator close coupled, with cross members mounted on AVM. They are fabricated with MS HR sheet steel of suitable thickness. The Base frame is pretreated and coated with primer-based powder / Epoxy paint.
- iv. Fuel Tank Fuel tank is fabricated out of 2/3mm MS HR sheet with support structure and is fitted with inlet and outlet connections.
- v. Silencer Hospital type Silencer is provided to suppress exhaust noise from the engine to meet CPCB II norms. The silencer and attached exhaust pipe should be properly covered with glass wool insulation and aluminum sheet.
- vi. Emergency Push Stop Button: The canopy has the provision of emergency push button, external to the canopy.
- vii. Performance Parameters DG with canopy are manufactured as per (ISO 3744 OR 8528 PT 10) to meet CPCB II norms of average 75 DBA under green field conditions at 1-meter distance from all four sides. The average stabilized hot air temperature rise with in the canopy is maintained within 10-degree C over and above ambient temperature.

#### Warranty

**The DG set shall be guaranteed against faulty workmanship/poor material quality and failures due to the same, for minimum of 12 months from the date of commissioning. The Major components like Crankshaft, Camshaft, Cylinder Head, Cylinder Block, connecting rod should carry warranty for 5 years/5000 running hours. No compromise will be entertained on this clause. The warranty should be from manufacturer of the engine and alternator and not by assemblers and any other agency. Certificate / letter for the same from engine manufacturer need to be produced along with tender submission documents.**

To ensure timely service backup in case of emergency, it is very essential that manufacturer Service office is available in West Bengal to ensure timely service, apart from their respective Service Dealers.

The tenderer should submit the toll-free number details in India for the engine manufacturer to ensure speedy service support and escalation matrix for service and repair. To ensure compliance to latest CPCB norms in force currently in India for DG sets, those manufacturers having two different models need to quote for the model with reduced emission. Non-compliance any of the above specs/requirements should be clearly mentioned in the tender, point by point.

## **BASE PLATE**

The diesel engine and the alternator shall be mounted on a common base plate made from suitable channel sections with welded joints. Suitable anti-vibration mountings duly approved by Bank's Engineer shall be employed to prevent transmission of vibration to the structure to the maximum extent possible.

- The fuel tank must be installed with required pipe connections as per standard.
- The fuel level gauge to be provided with a proper scale with a minimum division of 5 liters.
- Drain plugs shall be provided for draining mobile oil.
- FR casing battery shall be provided in a tray.

Exhaust piping: All M.S. pipes for exhaust lines shall be conforming to relevant IS. The runs forming part of factory assembly on the engine flexible connections up to exhaust silencer shall be the exhaust piping item. The work include necessary cladding of exhaust pipe work using 50 mm thick loosely bound resin(LBR)mattress/mineral wool/Rockwool, density not less than 120 Kg/m<sup>3</sup> and Aluminium cladding(0.6 mm thick) for complete portion. The exhaust pipe system includes necessary supports, foundation etc. to avoid any load or stress on turbo charger /exhaust piping.

The components used in the fabrication of the panel shall be of high quality/reliability and shall be of reputed make, the spares of which are readily available in the local market. The design, drawings and the complete panel shall be got approved from the local electrical inspectorate, if required.

**One set of operating manuals and two sets of control circuit drawing of panel in laminated form out of which one will be made available in the generator room near the Standard Control panel and other for the record purpose of Milk Union must be provided.**

SPARES AND TOOLS- The tenderer shall submit the list of standard tools and spares to be supplied along with the generating set (without any extra cost).

ERECTION -The scope of erection shall include for the supply and erection of the following:-

- The engine and the alternator placed on a common base plate shall be mounted on sufficient numbers of suitable capacity Cushy Foot or equivalent make anti-vibration mounts(AVMs) inside the acoustic enclosures to reduce DG set vibration and noise transmission to the surrounding structure and to distribute the load evenly.
- Civil work (foundation etc.) for DG set, AMF panel etc. as required for the above D.G Set will be made by the Milk Union. The tenderer should submit foundation drawings.

## **AMF POWER 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

### **• Contactors and MCCBs**

- 800A MCCB each for Main supply and DG set power supply (microprocessor-based release or equivalent) with short circuit and overload protection.
- Suitable 800 Amps 4 pole ATS /4 Pole 800 Amps Contactors for both Main Supply and DG set supply for smooth changeover facility and necessary interlocks similar to AC3 rating, (L&T) or equivalent, as approved by Milk Union.
- Engine shutdown and Alternator protection equipment.
  - i. Low lube oil pressure shutdown.
  - ii. High Coolant temperature shutdown.
  - iii. Engine over speed shutdown

### **• Alternator Protection**

1. Overload
  2. Short Circuit
  3. Earth fault
  4. Overvoltage
- Main supply voltage Monitor with under/over voltage adjustable setting (including but not limited to O/C, S/C, E/F protection)
  - Set of control relays
  - Set of indicating lamp load on set, load on mains, start failure, high temperature trip, low oil pressure, high temperature warning, battery low.
  - Push buttons for start, stop, reset, and silence alarm, DG / Mains supply contactors / ATS manual override.
  - Toggle switch for hooter ON/OFF.
  - Microprocessor based Engine Control unit with LAN connectivity and necessary software for remote monitoring and operation – Panel should support for this.
  - Copper bus-bar for phase of 800A rating and suitable size neutral to be provided (The size of bus-bar to be worked out considering 1.2 A per sq.mm current density) The panel shall be so designed that in the case of main supply failure, the diesel engine and the generator shall be started and on checking the generator voltage and frequency make available the generator power to the essential loads. On restoration of main supply, the generator supply shall not be

cut off immediately but after time lag of 45-60 seconds i.e. after stabilization of restored main supply and thereafter the engine shall be shut down automatically. If the engine fails to start after three attempts or fail to pick up rated speed, the engine starter shall trip automatically and there shall be an audio alarm to sound an unhealthy condition of the generator set. The panel shall have suitable circuitry incorporated therein for all the functions specified above complete with all required components viz. Control coils, relays, contact blocks, internal wiring etc. The components used in the fabrication of the panel shall be of high quality / reliability and shall be of reputed make, the spares of which are readily available in the local market. The design, drawings and the complete panel shall be got approved from the local electrical inspectorate. One set of operating manual and two sets of control circuit drawing of panel in laminated form out of which one will be made available in the generator room near the AMF Panel and other for the record purpose shall be provided.

## **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 Milk Union).

## GENERAL TERMS & CONDITIONS

1. The documents submitted by the bidders should be properly indexed & digitally signed.
2. During the scrutiny, if it comes to the notice to the tender inviting authority that the credential(s) and/or any other paper(s) has/have been of any bidder found incorrect/ manufactured/ fabricated, that bidder will not be allowed to participate in the tender process and that application will be rejected outright. The Bhagirathi Cooperative Milk Producers' Union Ltd. Reserves the right to cancel the N.I.T. at any time without showing any reason and no claim in this respect will be entertained.
3. During evaluation the Committee 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.
4. 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.
5. Inspection of materials may be undertaken at the supplier's premises whenever necessary by the Tendering Authority/ any officer authorized by the undersigned.
6. 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 the receipt of the information. Location of Service Center must be within West Bengal.
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. All the pages of this NIT must be duly signed, sealed and uploaded by the bidder as a token of acceptance of the Terms and Conditions of the NIT.
8. **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.
9. **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.
10. **Warranty:** The DG set shall be guaranteed against faulty workmanship/poor material quality and failures due to the same, for minimum of 12 months from the date of commissioning. The Major components like Crankshaft, Camshaft, Cylinder Head, Cylinder Block, connecting rod should carry warranty for 5 years/5000 running hours. No compromise will be entertained on this clause. The warranty should be from manufacturer of the engine and alternator and not by assemblers and any other agency. Certificate / letter for the same from engine manufacturer need to be produced along with tender submission documents. To ensure timely service backup in case of emergency, it is very essential that manufacturer Service office is available in West Bengal to ensure timely service, apart from their respective Service Dealers.
11. **Service/Repair:** 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.

12. **Warranty Extension:** The warranty of equipment would be extended if equipment remains down during the warranty period, for more than period mentioned below: -
  - 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 due to malfunctioning of the any part supplied by supplier or want of spares/ consumable, warranty would be extended by one Year.
  
13. **Payment:** Payment shall be released in 2 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:** 80% 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:** 10% 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.
  
14. **EMD & Security Deposit:** A (refundable) EMD amounting to Rs. 1,00,000/- should be deposited online through Net Banking, NEFT/RTGS in favour of The Bhagirathi Cooperative Milk Producers' Union Limited payable at Berhampore. EMD shall not carry interest. EMD of unsuccessful bidders shall be refunded within 2 working days after finalization of Award of Contract. EMD of the successful bidders shall be converted into Security Deposit and shall be released along with the first phase of payment.
  
15. **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 The Bhagirathi Co-operative Milk Producers' Union Ltd.
  
12. **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.
  - I. **Liquidated damages of 0.5%** per week 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.
13. **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.
14. **Site Preparation:** Preparation of site for installation and commissioning the Unit shall be arranged by the Milk Union.
15. **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.
16. **Delivery, Installation and Commissioning:** The materials must be delivered installed and commissioned in the Feeder Dairy Campus of The Bhagirathi Cooperative Milk Producers' Union Limited, Panchanantala, Berhampore within 30 days of Award of this Contract.
17. **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' country of origin.
18. **Registration of Goods:** If required under the Applicable Law, Goods supplied under the Agreement shall be registered for use in India.
19. **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.
20. **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.
21. **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.

22. **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.
23. **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.
24. **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.
25. **Applicable Law:** The Agreement shall be interpreted in accordance with the laws of Union of India.
26. **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.
27. The undersigned reserves the right to accept or reject any tenders and to cancel the entire tender process at any point of time without assigning any reason whatsoever.

**Sd/-**

Managing Director

The Bhagirathi Cooperative Milk Producers' Union Limited

Copy forwarded to:

1. E-Procurement portal of Govt. of West Bengal (<https://wbtenders.gov.in> )
2. Official Website ( [www.bhagirathimilk.com](http://www.bhagirathimilk.com) )



## Annexure – I

### 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 the undersigned hereby declare that the Diesel Generator offered in this bid \_\_\_\_\_ is as per industry standard and is devoid of any manufacturing defects.
7. 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)

**ANNEXURE-II**

**TECHNICAL SPECIFICATION FOR 25 KVA GENERATOR SET**

(Details to be furnished by the tenderer in Letter Head)

<b>SL No.</b>	<b>Description</b>	<b>Specification</b>
1	Generator KVA Rating / Model No	
<b>ENGINE</b>		
2	Make	
3	Model No	
4	BHP Output	
5	Cooling	
6	Aspiration	
7	No of Cylinders	
8	RPM	
9	Compression ratio	
10	Displacement (Itrs)	
11	Fuel oil	
12	Fuel consumption at no load	
13	Fuel consumption at 25% load	
14	Fuel consumption at 50% load	
15	Fuel consumption at 75% load	
16	Fuel consumption at full load	
17	Capacity of fuel tank (litres)	
18	Governor	
19	Starting system	
20	Lub oil specification	
21	Lub oil sump capacity	
22	Lub oil consumption (Itrs per hour)	
23	Coolant capacity (Engine + Radiator)	
24	Lub oil change period (hrs)	
25	Emission compliance	
26	Battery rating	
<b>ALTERNATOR</b>		
27	Make and Model	
28	Type	
29	Voltage	
30	Frequency	
31	Phase	
32	Rated current	
33	Power factor	
34	Enclosure	
35	Voltage regulation	
36	Class of Insulation Control Panel	

Seal and Signature of the Bidder

**ANNEXURE-II**

<b>CONTROL PANEL</b>		
37	Make	
38	Type	
39	Overall dimensions (L x B x H)	
40	Finish	
41	Sheet metal size	
42	Make and type of contactors / circuit breakers	
43	Make and type of instruments	
44	Make and type of switch fuse units	
45	Other facilities incorporated Generator set	
<b>GENERATOR SET</b>		
46	Noise level	
47	Overall dimensions of the DG set	
48	Overall canopy dimension	
49	Approx Total weight (Dry)	
50	Type of coupling/bearing details	

Seal and Signature of the Bidder