

Republic of the Philippines  
**DEPARTMENT OF FOREIGN AFFAIRS**  
**Bids and Awards Committee**  
2330 Roxas Boulevard, Pasay City

**TERMS OF REFERENCE**  
**PERIODIC MAINTENANCE SERVICES OF TWO (2) CAT GENERATOR SETS OF**  
**DFA MAIN BUILDING**

**ABC: PHP 980,000.00**

<b>I</b>	<b>BACKGROUND</b>	
	The Department of Foreign Affairs intends to procure periodic maintenance services for the two (2) units CAT Generators located at the DFA South Wing Annex Building. These Generator units need maintenance service to ensure continuous and efficient operation during power outage in the building.	
<b>II</b>	<b>OBJECTIVE</b>	
	To ensure the continuous and efficient operation of the generators during power outage in the building.	
		<b>STATEMENT OF COMPLIANCE</b>
<b>III.</b>	<b>SCOPE OF WORK</b>	
	<p>The Contractor shall:</p> <ol style="list-style-type: none"> <li>1. Provide all labor, supervision, equipment, materials and consumable items for the repair, delivery, overhauling, installation, testing and commissioning for the periodic maintenance of two (2) CAT Generator Sets;</li> <li>2. Conduct periodic maintenance for two (2) CAT Generator Sets with the following parameters; <ol style="list-style-type: none"> <li>a. Cooling System <ol style="list-style-type: none"> <li>1. Check radiator level</li> <li>2. Check water leaks, if any</li> <li>3. Check all radiator hoses</li> </ol> </li> <li>b. Fuel System <ol style="list-style-type: none"> <li>1. Check fuel level</li> <li>2. Check fuel filters</li> </ol> </li> <li>c. Air Induction and Exhaust System <ol style="list-style-type: none"> <li>1. Check Air Cleaner</li> <li>2. Check Exhaust Pipe</li> </ol> </li> <li>d. Lubrication System <ol style="list-style-type: none"> <li>1. Check Oil Level</li> <li>2. Check Oil Leaks, if any</li> </ol> </li> <li>e. Starting System <ol style="list-style-type: none"> <li>1. Check battery cables and connections</li> </ol> </li> </ol> </li> </ol>	

2. Check battery fluid and terminals
3. Check fan belts
4. Check alternator belts
- f. Control Panel
  1. Check PBC and Module
  2. Check all fuses
  3. Check all electrical connections
- g. Record the following Testing
  1. Voltage
  2. Frequency / RPM
  3. Oil Pressure
  4. Water Temperature
  5. Running Hour Meter
  6. Battery Voltage
- h. Battery
  1. Check battery water level and refill water, if necessary.
  2. Check Battery DC output voltage and charging rate.
  3. Replace existing 8pcs of 8volt Golf Cart battery.
- i. Sanitation
  1. Clean generator set including surroundings and coordinate with the end user for any trash that needs to be disposed.
- j. Preventive maintenance for Alternator
  - Conduct before maintenance running of Genset;
  - Remove alternators ventilation covers and disconnect power cables;
  - Visual inspection of AVR wirings and alternator windings;
  - Conduct standard testing of alternator;
  - Winding resistance test;
  - Insulation resistance test;
  - PI test;
  - Check rectifier assembly;
  - Cleaning of stator winding using portable blower and vacuum;
  - Inspect loose connection and parts;
  - Re-tightening of loose terminal connections;
  - Install and check to assure all covers and guard are in place and secure;
  - Test run of genset;
  - Test run of genset using manual regulation; and
  - Submit service reports and recommendations.
- k. Preventive maintenance for Automatic Transfer Switch (ATS)
  - Shutdown normal power for safety purposes;
  - Opening of ATS cover;
  - Cleaning up using vacuum cleaner and clean cloth inside the ATS Assembly;
  - Conduct contact resistance and insulation resistance for normal and emergency breaker;
  - Visual inspection of relays, wiring connection and fuses;
  - After PMS, conduct visual inspection with presence of client representative; and
  - Energization of normal power, submit report and recommendation if any.

	<p>3. Conduct engine tune-up and replace the following items;</p> <ol style="list-style-type: none"> <li>a. Replace radiator liquid with coolant additive</li> <li>b. Replace coolant/water filters</li> <li>c. Replace fuel filters</li> <li>d. Replace oil/lube filters</li> <li>e. Change engine oil</li> <li>f. Replace Fan Belts</li> <li>g. Replace fuel hoses</li> <li>h. Disposal of all waste fluids</li> </ol> <p>4. Conduct cleaning and flushing of radiator for two (2) CAT Generator Sets;</p> <ol style="list-style-type: none"> <li>a. Conduct walk around inspection prior to activities;</li> <li>b. Check radiator/ engine for any obstruction prior to test run;</li> <li>c. Test run./ warm up engine to circulate coolant prior for flushing;</li> <li>d. Drain radiator coolant until empty;</li> <li>e. Flushing of radiator using potable water until the water becomes clear;</li> <li>f. After flushing, charge the unit with fresh radiator coolant and fill with water up to its normal level;</li> <li>g. Dismantle radiator fan guard;</li> <li>h. Clean radiator fan blade;</li> <li>i. Clean radiator fins using pressure washer;</li> <li>j. Check radiator surroundings before returning the radiator fan guard;</li> <li>k. Re-installation of radiator fan; and</li> <li>l. Engine test run.</li> </ol> <p>5. Conduct de-clogging of fuel lines and rectify the leaks; and</p> <ol style="list-style-type: none"> <li>a. Shutdown genset prior to activities;</li> <li>b. Close supply and return line of genset 1 and 2;</li> <li>c. Drain fuel at fuel day tank, transfer to clean empty drum;</li> <li>d. Separate the clean fuel from the day tank and the sludge tank collected in day tank;</li> <li>e. Clean day tan and conduct flushing;</li> <li>f. Dismantle fuel supply and return line of genset 1 and 2 for de-clogging and flushing;</li> <li>g. Check any leak on fuel supply and return line;</li> <li>h. Return/ assemble fuel supply and return line;</li> <li>i. Conduct little flushing of fuel line before final connection;</li> </ol>	
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	<ul style="list-style-type: none"> <li>j. Open valve of supply and return line; and</li> <li>k. Engine test run.</li> </ul> <ul style="list-style-type: none"> <li>7. Provide Diesel Fuel for testing and commissioning.</li> <li>6. Furnish and submit a written Service Progress Report to the end user after the inspection and recommendations.</li> </ul>	
<b>IV.</b>	<p><b>TECHNICAL SPECIFICATIONS</b></p> <ul style="list-style-type: none"> <li>A. Generator Set No. 1 CAT D353 (Air Start Engine) 419 KVA, 335 KW 1200 RPM 60HZ</li> <li>B. Generator Set No. 2 CAT D353 (Battery Start Engine) 419 KVA, 335 KW 1200 RPM 60HZ</li> </ul>	
<b>V.</b>	<p><b>CONTRACTOR'S QUALIFICATIONS</b></p> <p>The <b>CONTRACTOR</b> must have the required experience and expertise to carry out the periodic maintenance for Generator Set.</p> <ul style="list-style-type: none"> <li>1. Must be a PHILGEPS member either red or platinum.</li> <li>2. Certified technician/s with at least three (3) years working experience in preventive maintenance of generators; and</li> <li>3. With a good track record.</li> </ul>	
<b>VI.</b>	<p><b>CONTRACTOR'S OBLIGATIONS</b></p> <p>The Contractor shall:</p> <ul style="list-style-type: none"> <li>a. Conduct the periodic maintenance, check-up and related minor repairs according to schedule to ensure reliable operation of the Generator Sets during the period coverage. Quotation must include the supplies/materials needed for replacement of engine oil, coolant and filters (breakdown of materials cost shall also be provided);</li> <li>b. Provide qualified technicians, supervision, tools and equipment necessary to conduct the periodic maintenance check-up and related corrective repairs;</li> <li>c. Undertakes minor adjustments and repairs as required in the manufacturer's periodic schedule. Labor and supplies, at no cost to DFA;</li> <li>d. Submit Service Report to the customer or site representative upon completion of work, before leaving the site. Detailed Incident Report may also be requested for further information needed;</li> <li>e. In case of major repair, the supplier will submit quotations of materials and spare parts needed, including scope of work to be done (applicable only if the unit is no longer under warranty);</li> </ul>	

	<ul style="list-style-type: none"> <li>f. Abide by all existing laws, codes, rules and regulations set forth by all government units and authorities;</li> <li>g. Accept the conditions of the equipment and facility as is, where is;</li> <li>h. Provide the services in a proper, professional and workmanlike manner at all times;</li> <li>i. Exercise the reasonable standard expertise, skill, care and diligence in the performance of the services;</li> <li>j. Retain sufficient number of personnel with the expertise required to provide the maintenance services;</li> <li>k. Ensure that the personnel possess the required skills and experience required to provide the service;</li> <li>l. Provide service personnel complete with Personal Protective Equipment (PPE) during maintenance and repair work;</li> <li>m. Ensure that service personnel wear proper uniforms and identification cards inside the Department's premises;</li> <li>n. Report before and after work or service to the designated personnel of OAMSS-EMD. Provide a service and maintenance report of the said work done; and</li> <li>o. Be responsible for the safety and cleanliness of the Generator Set Room.</li> <li>p. Include in the Bid Price breakdown the unit cost, labor and material cost of the project. Refer to the attached Bid offer Form.</li> </ul>	
<b>VII.</b>	<p><b>COVID19 PREVENTION AND SAFETY DURING OPERATIONS</b></p> <p>The Contractor shall:</p> <ul style="list-style-type: none"> <li>1. Ensure that assigned personnel are COVID free before entering the premises;</li> <li>2. Provide and ensure that assigned personnel observe IATF prescribed safety protocols (ie. face mask, face shields, and observe social distancing) within the DFA premises and comply with DFA security requirements; and</li> <li>3. Provide its personnel isopropyl alcohol and hand soap for personal hygiene.</li> </ul>	
<b>VIII</b>	<p><b>WARRANTY</b></p> <p>The Contractor shall provide a warranty of at least one (1) year in terms of the parts to be replaced.</p>	
<b>IX.</b>	<p><b>CONFIDENTIALITY CLAUSE</b></p> <p>The Contractor shall ensure that each of its personnel assigned to the Department shall execute and sign a Non-Disclosure Agreement,</p>	

	<p>which is to be submitted to the Department prior to the commencement of the service.</p>	
<p><b>X.</b></p>	<p><b>TERMS OF PAYMENT</b></p> <p><b>1. Progress billing</b></p> <p><b>a. 15% of the Contract Price:</b> upon submission of inspection report / written service progress report;</p> <p><b>b. 30%</b> upon draining and disposal of GenSet used engine fluids and filters (engine oil, coolant, oil filters, fuel filters, air filters, and batteries).</p> <p><b>c. 55% of the Contract Price:</b> upon completion and final acceptance of the project.</p> <p><b>2.</b> The Supplier shall be paid within thirty (30) working days upon the submission of the sales invoice and complete supporting documents through List of Due and Demandable Accounts Payable (LDDAP). The list of documentary requirements needed for payment will be provided by the Office of Financial Management Services-Financial Resource Management Division (OFMS-FRMD) upon signing the contract.</p> <p><b>3.</b> All payments shall be inclusive of all applicable taxes and other lawful charges.</p>	

Bidder must state compliance to each of the provisions in the Terms of Reference/Technical Specifications, as well as to the Schedule of Requirements. The Statement of Compliance must be signed by the authorized representative of the Bidder, with proof of authority to sign and submit the bid for and on behalf of the Bidder concerned. If the Bidder is a joint venture, the representative must have authority to sign for and on behalf of the partners to the joint venture. All documentary requirements should be submitted on or before the deadline for the submission of bids.

Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection.

Conformê:

[Signature/s]

[Name of the Bidder/ Bidder’s Authorized Representative/s]

[Position]

[Date]



**DEPARTMENT OF FOREIGN AFFAIRS**  
**OFFICE OF ASSET MANAGEMENT AND SUPPORT SERVICES**

**BID OFFER**

**PROJECT:** SUPPLY OF LABOR, TOOLS, MATERIALS, EQUIPMENT AND TECHNICAL EXPERTISE FOR THE PERIODIC MAINTENANCE OF GENERATOR NO. 1 AND 2 (CATERPILLAR ENGINE)

**DURATION:** UNTIL COMPLETION OF REQUIRED REPAIRS AND/OR MAINTENANCES WORKS.

**ADDRESS:** DEPARTMENT OF FOREIGN AFFAIRS. 2330 ROXAS BOULEVARD, PASAY CITY, PHILIPPINES 1300

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	LABOR COST	TOTAL COST
1	<b>ENGINE MODEL CATERPILLAR D353</b> Conduct maintenance for two (2) units CAT Generator with the following parameters:	2 UNITS			
	a. Check Cooling system				
	b. Check Fuel System				
	c. Check Air Induction and Exhaust System				
	d. Check Lubrication System				
	e. Check Starting System				
	f. Check Control Panel				
	g. Record the following Testing				
	g.1. Testing without load				
	Voltage				
	Frequency/ RPM				
	Oil Pressure				
	Water Temperature				
	Running Hour Meter				
	Battery Voltage				
	g.2. Testing with Load				
	Voltage				
	Frequency/ RPM				
	Current				
	Oil Pressure				
	Water Temperature				
	h. Replace 8V Golf Cart Battery	8 PCS			
	i. Sanitation				
	Clean generator set including surroundings and include disposal of debris and trash.				
	<b>Sub-Total</b>				
2	<b>Conduct Alternator Preventive Maintenance</b>	2 UNITS			
	Scope of works				
	a. Conduct before maintenance running of Generator Set.				
	b. Remove Alternators ventilation covers and disconnect power cables.				
	c. Visual inspection of AVR wirings and Alternator windings.				
	d. Conduct standard testing of Alternator.				
	e. Winding Resistance Test				
	f. Insulation Resistance Test.				
	g. PI Test				
	h. Check rectifier assembly				
	i. Cleaning of stator winding using portable blower & vacuum.				
	j. Inspect loose connection and parts.				

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	k. Re-tightening of loose terminal connections.				
	l. Install and check to be sure all covers and guard are in place and secure.				
	m. Generator set test run				
	n. Generator set test run using manual regulation.				
	o. Submit service reports and recommendations.				
	<b>Sub-Total</b>				
<b>3</b>	<b>Conduct Preventive Maintenance of Automatic Transfer Switch (ATS)</b>	<b>3 SETS</b>			
	Scope of works				
	a. Shutdown normal power for safety purposes.				
	b. Opening of ATS Cover.				
	c. Cleaning by using vacuum cleaner and clean cloth inside the ATS assembly.				
	d. Conduct Contact resistance and insulation resistance for Normal and Emergency Breaker				
	e. Visual inspection of relays, wiring connection and fuses.				
	f. After PMS, conduct visual inspection with presence of client representative.				
	g. Energization of normal power, submit report and recommendation if any.				
	<b>Sub-Total</b>				
<b>4</b>	<b>Conduct complete engine tune-up and replace the following items. All items must be genuine and brand new.</b>	<b>2 UNITS</b>			
	Scope of works				
	a. Replace radiator liquid with coolant additive (8 pails of super coolant)	8 Pails			
	b. Replace fuel primary filter	2 Pcs			
	c. Replace fuel filters	4 Pcs			
	d. Replace oil/tube filters	4 Pcs			
	e. Change Engine oil	7 Pails			
	f. Replace Fan Belts	4 Pcs			
	g. Replace Alternator belts	1 Pcs			
	h. Replace Air Filter element	2 Pcs			
	i. Disposal of all waste fluids				
	<b>Sub-Total</b>				
<b>5</b>	<b>Conduct cleaning/ Flushing of radiator and replacement of coolant for two (2) Units CAT Generator;</b>	<b>1 LOT</b>			
	Scope of works				
	a. Conduct walk around inspection prior to activities				
	b. Check radiator/engine for any obstruction prior to test run				
	c. Test Run/ wamp up engine to circulate Coolant Prior for Flushing				
	d. Drain Radiator Coolant and until empty.				
	e. Flushing of Radiator using potable water till the water becomes clear.				

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	f. After flushing, charge the unit with fresh radiator coolant and fill with water up to its normal level.				
	g. Dismantle radiator fan guard				
	h. Clean radiator fan blade				
	i. Clean radiator fins using pressure washer.				
	j. Check radiator surroundings before returning the radiator fan guard.				
	k. Re-installation of radiator fan				
	l. Engine test run.				
	<b>Sub-Total</b>				
<b>6</b>	<b>Conduct de-clogging of fuel lines and rectify the leaks.</b>	1 Lot			
	Scope of works				
	a. Shutdown generator set prior to activities				
	b. Close supply and return line of Generator sets 1 and 2.				
	c. Drain fuel at fuel day tank, transfer to clean empty drum				
	d. Separate the Clean fuel from the day tank and the sludge tank collected in day tank.				
	e. Clean day tank and conduct flushing				
	f. Dismantle fuel supply and return line of Generator set 1 and 2 for de-clogging and flushing.				
	g. Check any leak on fuel supply and return line.				
	h. Return/ assemble fuel supply and return line.				
	i. Conduct little flushing of fuel line before the final connection				
	j. Open valve of supply and return line				
	k. Engine test run.				
	<b>Sub-Total</b>				
<b>7</b>	<b>Furnish and submit written Service Progress Report to the End-user after the inspection and recommendations.</b>	1 SET			
	<b>DIRECT COST</b>				
	<b>INDIRECT COST</b>				
	<b>12% VAT</b>				
	<b>TOTAL BID OFFER</b>				

Note: Refer to "Terms of Reference" (TOR) for the additional scope of works and Terms of Payment. **Kindly hand write "Comply" on the Statement of Compliance of the TOR.**

\_\_\_\_\_  
 FULL NAME AND SIGNATURE

\_\_\_\_\_  
 DATE