

# TERMS OF REFERENCE COMPREHENSIVE PREVENTIVE MAINTENANCE FOR THE STAND BY GENERATOR SET WITHIN UP MANILA

# Background

Preventive Maintenance is an essential part of cost effective operation but it needs a careful planned and systematic program of inspection, testing, adjustment and servicing of Stand by Generator set. This involves keeping maintenance records so that performance and operating cost can be properly monitored and evaluated. The service provider for Genset maintenance shall conduct inspection and Maintenance Service Program, which is designed specifically for the respective of the specified standby Genset of each University of the Philippines colleges and units to keep it in optimum performance reliable in case power outages occur and prevent spoilage of biological agents, reagents and interruption of critical operations.

# **DEFINITION OF TERMS**

**UNIVERSITY** - shall referred here as the **UNIVERSITY OF THE PHILIPPINES**, the national university of the Philippines , a public and secular institution of higher learning, created by virtue of Act 1870, as amended and reorganized and operating by virtue of Republic Act No. 9500, through its constituent university, University of the Philippines Manila with address at 8/F RCB Building, Philippine General Hospital Manila, represented herein by its Vice Chancellor for Administration **DR. ARLENE ALCID-SAMANIEGO** 

**SERVICE PROVIDER** – shall refer here as the contractor that gained the rights to render and provide the Generator Set (genset) unit technical services/preventive maintenance through competitive bidding.

# ARTICLE I SCOPE OF WORK

The SUPPLIER shall provide for one (1) year preventive maintenance program for Five (5) Genset unit enumerated below

The SERVICE PROVIDER shall Perform the Quarterly Comprehensive Preventive Maintenance (PM) for one year for the following Generator Set units of the UNIVERSITY:

Area Served/

Type of Genset	Capacity	
Salcedo Building/ Stand by Genset	75 KVA	2016
University Library/ Stand by Genset	75 KVA	2016
IMS ITC Bldg. /Stand by Genset	75 KVA	2016
CPH /Stand by Genset	220 KVA	2011
NIH Bldg./ Stand by Genset	500 KVA	2009
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#### INSPECTION:

#### Service Level I- QUARTERLY PREVENTIVE MAINTENANCE

Genset Technician will inspect generator set every three (3) MONTHS (quarterly), Service Level I is a detailed inspection of all genset systems to determine if each system is functioning within the acceptable standards and this consist of a walk around inspection.

#### Walk around inspection

# **Cooling System**

Check coolant level, Maintain level within 13mm(1/2 inch – or as specifiead the the catalog of the genset if any) to bottom of filter neck or proper level on sight gauge (if equipped). Inspect worn out, broken or loose belts. Adjust if necessary. Check or replace hoses if necessary. Check/inspect radiator fins for debris, loose,breoken guard and leaks.

#### **Fuel System**

Check for leaks. Drain water separator (if equipped). Check fuel tanks level., primary and secondary fuel filter and clean primary fuel filter if necessary.

#### Air Induction and Exhaust System

Inspect and clean or replace air filter element. Check air filter indicators for proper operation. Inspect turbo charger for proper operation, check for leaks and turbine/ compressor wheel endplay and redial clearance on the turbine wheel and shaft.

# **Lubricating Oil System**

Check oil level between the Add and Full marks on the depthstick, Change oil if already due, replace filters. Clean crankcase breather if necessary.

# Starting System

Check / Inspect starter operation, inspect to loose connection. Clean top of batteries. Check electrolyte level. Check for loose connection, Check/ inspect battery charger operations and records charging amperage reading.

#### **Control Panel**

Visually inspect: Check for loose, broken or damaged wiring or components. Check/ inspect engine protective devices and test proper operations. Check that all switches, breakers are in proper operation for automatic starting.

#### **Power Generator**

Check/inspect visually and inspect for loose connection and burnt wires.

### Sanitation

Clean generator set including surroundings and coordinate with the end user for any trash that needs to be disposed off. Start the engine and check all gauges, oil pressure, fuel gauge, rpm (frequency) and voltage reading. Perform minor adjustment if necessary.

# **Automatic Transfer Switch (If installed)**

Checking of ATS inspection parameters, mild tuning of control setting if necessary. Simulation/ testing of ATS from normal power to emergency power and visa versa. Simulation/testing of voltage sensing relay function. Cleaning of ATS compartment.

# Response Time in Case of Emergency Call

The SERVICE PROVIDER shall also be readily available in case a problem with the critical genset operation occurs. Immediate response for service or repair may even be availed anytime of the day even during night time and holidays. Response time should be within one (1) hour especially for failure of genset to operate especially for those serving critical operation occur. The SERVICE PROVIDER shall arrive with the complete tool, willing to lend a back up battery and battery charger to series and activate the existing malfunctioning batteries if any.

Service Reports

The service provider shall also furnished and submit a written Service Progress Report to the end user after the inspection showing the finding and recommendations. The technician engineer shall be in uniform every visit for service.

#### Quotations

Repair quotation based on the genset technicians findings/ analysis during emergency/ scheduled inspection will be submitted automatically for University of the Philippines Manila, CPDMO or respective colleges or units Administrative Officers approval.

# Change Oil and replacement of Oil and Fuel Filter - Service Level II

The service provider shall conduct a once a year change oil and replacement of oil and fuel filter which is included in the total contract price for the entire comprehensive generator set preventive maintenance program.

# ARTICLE II CONTRACT PRICE

- a. For and in consideration of the performance and accomplishment of the GENERATOR SET PREVENTIVE MAINTENANCE the UNIVERSITY shall pay the Generator Set Service Provider the total amount of FOUR HUNDRED THOUSAND PESOS (Php 400,000.00) for a one year preventive maintenance for Five (5) generator sets. Subject to pertinent laws on government contracts and auditing procedures.
- b. The contract price is inclusive of all duties and taxes.
- c. No changes shall be made on the Contract Price by reason of escalation in currency. Any adjustment in Contract Price shall be done in accordance with guidelines provided by law.
- d. The payment of escalation costs shall be subject to the unilateral and written approval of the UNIVERSITY and to availability of funds.

#### ARTICLE III

#### **GENERATOR SET / EQUIPMENT AVAILABILITY**

The UNIVERSITY agrees to make the air-con unit available for maintenance services at the genset/ equipment site. However, in some untoward instances or unavailability of the genset unit due to renovation of the area where the unit is installed, or the unit was condemned already, or other reason the SERVICE PROVIDER shall notify the UNIVERSITY that the preventive maintenance has not been conducted on the subject unit. In case the monthly preventive maintenance has not been conducted due to the abovementioned reasons a corresponding cost will be deducted equivalent to quarterly preventive maintenance service charge per genset unit not maintained per quarter.

#### ARTICLE IV

# **CORRECTIVE MAINTENANCE**

- a. It is understood that the unit under the agreement is in good operating condition on the date the agreement becomes effective. SERVICE PROVIDER reserves the right to inspect any unit to be placed in the Preventive Maintenance Agreement to determine its operating condition. Any repair necessary to restore the genset unit to good working before inclusion in the Preventive Maintenance Agreement will be charged to the UNIVERSITY. Genset
- b. unit not included in the number and type of unit in this agreement due to other reason or installation of the unit after the effectivity of this contract shall be charge by the contractor at reasonable cost provided the UNIVERSITY agreed and approved the SERVICE PROVIDER proposal and quotation to conduct the preventive maintenance for the additional air-con unit on top of FIVE (5) genset units in the contract.
- c. The scope of the program is limited only to visual/ simple adjustment and diagnostic inspections, change oil and replacement of oil and fuel filters as well as the submission of findings, recommendations and quotations. All other activities such as the disassembly of radiator, rewind of main alternator and exciter, pull out of crankshaft oil seal front/ rear, installation of water pump, valve clearance adjustment, AVR, Starter and Charging alternators, rewiring harnesh and or overhauling of the Genset arising from either the normal wear and tear or through the recommendations of the genset technicians shall be treated separately.
- e. Equipment for repair that will be included in the Preventive Maintenance Agreement has no standard repair

- f. charge. A separate proposal of these repairs will be charge on a time and replacement parts basis. No repair will be started without the approval of the UNIVERSITY to the proposal/ quotation of the SERVICE PROVIDER covering Purchase, Contract or Job Order.
- g. In case that some of the subject genset unit for preventive maintenance is declared unserviceable or for condemnation during the service contract the SERVICE PROVIDER shall report the problem to the UNIVERSITY and the preventive maintenance on the genset unit will discontinue. A corresponding amount will be deducted proportional to the service being rendered by the SERVICE PROVIDER.
- h. Similarly, newly installed and/or existing genset not part of this contract may be included in the preventive maintenance upon the proposal of the end user or the SERVICE PROVIDER provided that the UNIVERSITY will approved the quotation for additional service fee that is reasonable and at the same rate to prevailing service fee.
- i. In case the SUPPLIER found that the some of the subject genset units listed in Article I, FIVE (5) genset units cannot be maintained for whatever reason such as renovation of the room, or the unit is declared unserviceable or for condemnation the SERVICE PROVIDER shall immediately notify the UNIVERSITY corresponding amount shall be deducted to genset preventive maintenance SERVICE PROVIDER.

# ARTICLE V

# **PAYMENT TERM**

- a. The UNIVERSITY shall pay the SERVICE PROVIDER the total contract price in quarterly basis equivalent to One hundred thousand pesos (Php 100,000) every after maintenance
- b. The UNIVERSITY shall only pay after the acceptance of the Preventive Maintenance performed by the SERVICE PROVIDER in compliance with this Agreement.

#### ARTICLE VI

#### **CUSTOMER'S OBLIGATION**

#### The UNIVERSITY shall

- a. At all-time keep the genset units in the proper operating condition as recommended by the SERVICE PROVIDER and inform SERVICE PROVIDER for the operating status from time to time.
- b. Inform SERVICE PROVIDER of any genset unit relocation. Reinstallation/ relocation may be done delegated to the SERVICE PROVIDER at standard service rate upon receipt of an official order number.
- c. Use the genset units in normal operation and may be in accordance with such instruction and recommendation as may be issued by the SUPPLIER and updated time to time.
- d. Shall ensure that the SERVICE PROVIDER representatives have full and free access to the genset unit and other facilities, electrical wiring that the unit is connected and information at the equipment site as SERVICE PROVIDER shall reasonably require in performing its duties under this terms of reference/agreement. In the event of an emergency repair being required prior to the scheduled Preventive Maintenance visit, the SERVICE PROVIDER agrees to advance the scheduled PM visit not greater than one month 30 days only.

### ARTICLE VII

# **BREACH OF AGREEMENT**

- In case of breach of any provision/s in this Agreement, the parties agree to use their best efforts to amicably resolve the matter.
- b. The UNIVERSITY shall have right to withhold any payment due or terminate this Agreement for failure of the SERVICE PROVIDER to comply with any of their undertakings as appearing in Articles I and II of this Agreement.
- c. Notice for amicable settlement of any breach or controversy in the implementation shall be provided in writing by the aggrieved party.
- d. When the SERVICE PROVIDER fail to satisfactorily deliver the maintenance services under the contract within the specified time under Article I of the agreement, the SERVICE PROVIDER shall be liable for damages for the delay and shall pay the amount of ten percent (10%) of the preventive maintenance as appearing in Article II-a of the agreement by way of liquidated damages. Such amount shall be deducted from any money due or which may become due to the SERVICE PROVIDER.
- e. In case of conflict between the Parties, arising from this agreement, both parties agree to freely and voluntarily submit themselves to necessary consultation and negotiation for purposes of amicable settlement and find a

mutually acceptable solution to their dispute. Existing University policies on alternative dispute resolution shall

be followed by the parties.

f. Should Parties fail to reach an amicable settlement of their dispute, the same shall be submitted to arbitration, in accordance with Republic Act No. 9285 or the ADR Law of 2004. However, should the dispute between the parties reach the counts of law, the parties agree the competent courts of City of Manila shall have exclusive jurisdiction over the same.

**Prepared by the Technical Working Group:** 

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