



PHILIPPINE NATIONAL OIL COMPANY

PNO Building VI, Energy Center

Rizal Drive, BGC, Taguig City

Tel. No.: 8789 – 7662

www.philgeps.gov.ph / www.pnoc.com.ph

REQUEST FOR QUOTATION / PROPOSAL

The PHILIPPINE NATIONAL OIL COMPANY (PNOC) through its Bids and Awards Committee (BAC), invites all interested and PhilGEPS-registered suppliers / contractors / consultants to submit quotations / proposals for the following company requirements:

Date : **June 20, 2023**
Project Title : **Technical Evaluation, Diagnosis and Analysis of Building 5 and 6 Electrical System**
Reference No. : **2023-06-180**
Total ABC : **PhP761,280.00**
Submission Deadline: **July 3, 2023 / 5:00 PM**

Accomplished **Price Quotation/Proposal and Compliance Form** may be submitted through registered or electronic mail to the PNO Procurement Management Division at the above address or to procurement@pnoc.com.ph and cdbbool@pnoc.com.ph no later than the submission deadline together with the following documentary requirements and information:

- Mayor's/Business Permit
- PhilGEPS Registration Number
- Latest Income / Business Tax Return
- Signed Terms of Reference / Technical Specifications Sheet (if applicable)
- Omnibus Sworn Statement (Unnotarized) copy may be submitted prior to submission deadline, but the notarized one shall be submitted after award or before payment).

Additional Requirements

- DTI Certificate or SEC Certificate
- Submit at-least Three (3) satisfactorily completed Electrical maintenance or Electrical Installation project. As proof, Bidder must submit certification issued by the client (NOA, NTP, PO/Contract, or Certificate of completion) to attest to the satisfactory service rendered by the contractor.
- Submit Project Inspection certificate (To be issued by PNO)

The PNO reserves the right to accept or reject any or all quotations/proposals or parts thereof, to waive formality therein or to accept such or to award any that are considered most advantageous to the company.

Thank you.


ATTY. GRACIELA M. BARLETA
Chairperson
Bids and Awards Committee

PRICE QUOTATION / PROPOSAL AND COMPLIANCE FORM

Technical Evaluation, Diagnosis and Analysis of Building 5 and 6 Electrical System

LOT No.	UOM	Technical Specifications	QTY	Total Quotation Amount
1	lot	Technical Evaluation, Diagnosis and Analysis of Building 5 and 6 Electrical System <i>Note: Please see attached Terms of Reference</i> (ABC: PhP761,280.00)	1	
Contract Duration:		Forty Five (45) Calendar days reckoned from the date of receipt of Notice to Proceed		
Location :		PNOC Building 6, Energy Center, Rizal Drive, BGC Taguig City		

TERMS OF REFERENCE

SCOPE OF WORKS:

The scope of the project is to provide technical service in conducting the technical evaluation, diagnosis, power quality analysis and load profiling, thermal scanning of electrical panels and equipment terminals and insulation resistance test of service entrance cables, feeder and sub-feeder cables. Includes checking & retightening of cable joints and connections, cleaning, vacuuming of accumulated dirt on all electrical panels of the building. Scope also includes the provision of technical personnel, tools, equipment and calibrated testing instrument adoptable to building electrical system. The expertise must be with full competence that meets the requirements of PNOC. The project comprises assessment report and photographs on the analysis of buildings power system, peak and full load analysis to include graphical representation of systems electrical parameters with comments, technical analysis and recommendations.

LABOR REQUIREMENT/S:

- Provide technical personnel trained to operate electrical test instruments, certified thermographer, supervising engineer, safety gadgets, standard tools, data logger and appropriate monitoring test instruments.
- Contractor must have at-least Five (5) years of experience in conducting preventive maintenance, electrical audit and electrical installation works (Attach DTI or SEC Certificate).
- Contractor must be specializing in Electrical works.

OTHER DOCUMENTARY REQUIREMENT/S:

- Submit at-least Three (3) satisfactorily completed Electrical maintenance or Electrical Installation project. As proof, Bidder must submit certification issued by the client (NOA, NTP, PO/Contract, or Certificate of completion) to attest to the satisfactory service rendered by the contractor.
- Submit Project Inspection certificate (To be issued by PNOC)

MATERIAL REQUIREMENT:

The contractor shall provide, among others, the following primary instruments.

- ❖ Power data recorder with three (3) sets of rope or clamp type current transformers in clip or clamp type connectors, thermographic scanner, insulation resistance tester and other necessary tools and instruments to verify, record, analyze and perform the needed test to check the status of PNOC compound and Buildings Electrical System.

DELIVERABLES FOR THE PROJECT:

- ❖ Hard and soft copy of report for both numerical and graphical presentation of recorded data's.
- ❖ Analysis, Comments and recommendation.
- ❖ Price Quotation for additional works to be done and scope of work.

PROJECT EXECUTION REQUIREMENT:

1. Mobilization of personnel and tools.
2. Isolation of incoming power line, disconnect switches and power fuses lines prior to servicing and testing whenever necessary.
3. Determine the best and safe area of installation.
4. Properly position required equipment, safety devices and warning signs as required.
5. Carefully connect the instrument as per test to be performed on the following Electrical Equipments as follows:

5.1. Low Voltage Switchgear:

- a. Open front and rear panel of switchgear and check for loose items and anything foreign to the switchgear that may hamper its efficient or correct operation.
- b. Inspect for physical condition, proper alignment, anchorage and grounding.
- c. General cleaning of cubicle by air blowing, vacuuming and wiping of all portions.
- d. Inspect all wire terminals for abrasions, corrosion and carbonation of contacting surfaces and other sign of material fatigue.
- e. Check for loose, worn out or missing parts of operating mechanism.
- f. Check operating condition of circuit breaker with regards to their opening, closing and tripping function
- g. Draw out circuit breakers to clean and check stationary and movable contacts, deteriorated springs and worn out contact.
- h. Lubrication and alignment of circuit breakers mechanism.
- i. Retightening of Bus bar bolts, terminal connections and cable connection of circuit breaker and terminal connection of control wiring.
- j. Record and perform the following test (for 440V and 230V power supply).
 - Insulation Resistance Test
 - Contact Resistance Test
 - Manual Test Trip Operation
 - System voltage
 - System current
 - Power (Kw, Kva, Kvar)
 - Energy consumed (kWhr)
 - Power factor (pf)
 - Harmonic distortion (Vthd & Ithd)

- Line disturbances (Transient, Surge, Sag, Swells)
- Frequency variation

Note: Data logger should be set to record for seven (7) days each point in 15 minutes recording interval.

5.2. Twenty-one (21) units Distribution Transformers and One (1) unit 300Kva Dry Type Transformer:

- a. Record nameplate data and other information.
- b. Isolation of terminal connections and grounding system.
- c. General inspection, check up and cleaning of terminal, bushings, casings & accessories.
- d. Check inspect for leaks, cracks and other defects.
- e. Check transformer oil level.
- f. Perform the following standard test:
 - Transformer Turn Ratio (TTR)
 - Winding Insulation Resistance
 - Polarization Index (PI)
 - Winding Resistance Measurement
 - Insulation power factor
 - Exciting current
 - Sweep Frequency response analysis (SFRA)
 - Short circuit / leakage reactance test
- g. Verify auxiliary devices operation.
- h. Retightening of terminal connection and grounding systems.
- i. Provide technical report certified by Professional Electrical Engineer.
- j. Energization of power transformer.
- k. Submission of test result certified by duly licensed Professional Electrical Engineer (PEE).

5.3. Main Power Isolator and Power Fuse:

- a. Check and clean load break switch (LBS), power fuse, lightning arrester, power cable termination, insulator bus bar and other components mounted therein.
- b. Check fuse holders for adequate mechanical support and retighten insulators.
- c. Check clip tightness and contact alignment.
- d. Continuity check.
- e. Application of high voltage grease (conductive) on all live contacts
Perform the following test:
 - e.1 Insulation Resistance test
 - e.2 Contact resistance test

5.4. Power Cables:

- a. Cleaning of termination kit and lugs
- b. Conduct insulation resistance test
- c. Retightening of terminal connection and grounding system.

5.5. THERMAL SCANNING (To be conducted before and after Preventive Maintenance and be performed and certified/signed by a certified thermographer)

- LVSG (ACB, Capacitor Bank, X'former terminals, ATS and MCCB's).
- MDP, Distribution panel, Power and lighting panels.

- Power supply end to end equipment terminals.
 - Busbar and cable connections.
6. Always check instrument connections and termination for correct data collection and safety.
 7. Secure the instrument for safety before leaving (data logging instruments).
 8. Check the condition of the instrument as desired and required.
 9. Submit report on data conducted, diagnosis complete with assessment/analysis, comments and recommendations.
 10. Test report should be duly signed by the assigned supervising Engineer and test personnel conducted the analysis.
 11. All work area must be cleared and cleaned
 12. Demobilization of personnel, tools and equipments

GENERAL PROVISIONS:

1. A joint inspection must be conducted by the Contractor and PNOC-Admin GSD Representatives on the specific works to be done for the project
2. The contractor is required to inspect and examine the site and the surroundings of the proposed project to arrive to an estimate of the labor, equipment, facilities and services necessary to carry out the work.
3. The contractor must conduct proper planning and safety orientation meeting to all personnel involved in the work prior to commencement.
4. The contractor is required to coordinate all activities and work relative to the project with the PNOC Admin-GSD representative for proper monitoring and coordination
5. The Contractor shall commence work on the agreed Start Date and shall carry out the work in accordance with the program of work submitted by the contractor, as updated, with the approval of the PNOC Admin-GSD representative and complete the project by the completion date as indicated in the TOR
6. The Contractor shall be liable for all fire and accident claims and other related claims arising from injuries and damages, which may occur in relation to the execution of the project.
7. The Contractor shall hold PNOC and its personnel free from any and all liabilities for damages arising from injuries or liabilities to persons or damages to property occasioned by any act of omissions of the contractor including any and all expenses which may be incurred by PNOC-Admin GSD and its personnel in the defence of any claim, action or suit.
8. The cost of any and all rework and/or restoration of damaged properties due to Contractor's poor workmanship or negligence shall be borne by the contractor.
9. The Contractor must submit a list of personnel assigned to the project before commencing the above scope of works.
10. The Contractor must comply with all standard health and safety requirements to include, among others, the use of personal protective equipment by all workers, installation of safety signage, proper ID and observe company rules and regulations on safety and security.
11. The work shall be executed in the best and thorough manner throughout the project timeline to the satisfaction of PNOC-Admin GSD, as represented by its engineers and supervisors who will jointly interpret the meaning of the scope of work and its conditions and shall have the power to reject any work, method of accomplishing every part of work and material used which in their judgement are not in full accordance with the specifications and/or description as provided in the scope of work and are deemed to be disadvantageous to PNOC.
12. The contractor should follow proper procedures for entering the compound (i.e., visitor's log books, Contact Tracing forms, presentation of vaccine cards, etc.)
13. Contractor should provide all workers with proper safety equipment (i.e., hard hats, harness, reflectorized vest, etc.)

14. The employees and workers are required to wear proper uniforms and IDs at all times within compound premises.
15. The contractor is required to coordinate all activities and work relative to the project with the GSD representative for proper monitoring and coordination.
16. The management will assign the contractor certain rooms or areas where materials and equipment may be stored, but this will be at the contractor's risk as the management / authorities will not be liable for any damage or loss.
The contractor is not allowed to set-up barracks / Temporary quarters for their workers within PNOC Compound.

SITE POSSESSION:

1. The contractor confirms that he has inspected the site where the work will be performed; that he has informed himself fully as to the conditions which might affect the nature, extent and cost of the work required; that PNOC shall in no way be responsible for any costs or expenses which may be incurred on account of failure of the contractor to make an accurate examination of present and/or assessment of future factors that may affect the cost of execution.
2. Tapping of equipment and other related work shall be properly coordinated with PNOC-Admin GSD designated representative for provision of electrical power source for outlets
3. The GSD shall designate a specific area to be used by the contractor as temporary facilities/storage area/administration area in connection with the project

COMPLETION OF WORK:

- Work should be completed in forty-five (45) calendar days including report submission.
Work schedule: reckoned from the date of receipt of the notice to proceed.
7:00am onwards (24/7) for work that does not require power shutdown
7:00am onwards of weekend (Saturdays & Sundays) for works that requires power shutdown.

NOTE: Delays due to work stoppage ordered by GSD shall not be counted against the set completion date.

WARRANTY PROVISIONS:

- Preventive maintenance workmanship shall be guaranteed for a period of One (1) year from date of acceptance. At any time within the period of guarantee and upon notification, the contractor shall repair and/or rectify all the deficiencies, including replacement of parts or entire unit, at the sole option of PNOC.

TERMS AND CONDITIONS

1. Payment Terms: Government Terms - full payment upon completion of delivery/implementation, or subject to the conditions specified in the Scope of Works/Activities or Terms of Reference.
2. All entries shall be typed or written in a clear legible manner.
3. Bidder shall offer one (1) bid only. Alternative bids shall be rejected.
4. All prices offered herein are valid, binding and effective for THIRTY (30) calendar days upon issuance of this document.
5. As a general rule, price quotations to be denominated in Philippine Peso shall include all taxes, duties and/or levies payable.

6. In case of tie quotations, tie breaking shall be on draw lots or toss coin.
7. In case supplier pro forma quotation is submitted, conditions will be governed by the submitted signed Terms of Reference / Technical Specifications Sheet.
8. During evaluation of quotation/proposal, the project proponent may require additional documents to verify, validate and ascertain the compliance of the supplier/contractor or consultant.

We undertake, if our Proposal is accepted, to supply/deliver the goods/services in accordance with the specifications and/or delivery schedule.

We agree to abide by this quotation/proposal for a period of thirty (30) calendar days, which is the price's validity period and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a Contract or a Purchase Order is executed, this Quotation/Proposal shall be binding upon us. We understand that you are not bound to accept the lowest or any Proposal you may receive.

Signature over Printed Name : _____

Designation/Position : _____

Name of Organization : _____

Organization Address : _____

Tel No. / Mobile No. and Email Address : _____