



PHILIPPINE NATIONAL OIL COMPANY

PNOC 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 : **May 5, 2023**
Project Title : **Supply, Delivery, Installation, Testing and Commissioning of Level Sensors**
Reference No. : **2023-04-128**
Total ABC : **PhP849,500.00**
Submission Deadline: **May 12, 2023 / 5:00 PM**

Accomplished Price Quotation/Proposal and Compliance Form may be submitted through registered or electronic mail to the PNOC 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
- PCAB License
- 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

- Site Inspection Certificate

The PNOC 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

TERMS OF REFERENCE

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF LEVEL SENSORS

I. Scope of Work:

1. The Contractor shall present their copy of the Notice to Proceed to the Park Management Department.
2. A site visit must be conducted by the Contractor before delivery to identify necessary labor, tools, and materials needed during delivery and installation.
3. Mobilization.
4. Supply and delivery of Radar or ultrasonic type Level Sensors/transmitters and level displays/controllers in accordance with the technical specifications provided in IV. Technical Specifications, including Operator's Manual and Service Manuals, Calibration Certificates, and other necessary documents.
5. Attend safety orientation and secure necessary work permits.
6. Preparation of materials, tools, and equipment.
7. Installation, testing, and commissioning of Radar or ultrasonic type Level Sensors and level displays.
8. Housekeeping and demobilization of tools, equipment, and personnel at the site.
9. Training and instruction on the proper use, calibration, and maintenance of the sensors and other devices.
10. 24/7 on-call servicing through actual/physical visits/troubleshooting by service personnel and through phone calls.
11. Warranty and post-warranty service and support, including but not limited to replacement and repair of faulty equipment, for a period of not less than one (1) year after the completion of the project.

II. Project Location:

PNOC-Industrial Park at Brgy. Batangas Dos, Mariveles, Bataan

III. Labor Requirements:

1. Contractor must have at least a PCAB License Category E
2. Contractor must have at least 2-years experience on the installation, testing, commissioning, maintenance and calibration of level sensors.
3. Contractor shall provide the necessary personnel to conduct the project execution requirements safely and properly and is not limited to what are stated below.
4. The minimum work experience requirements for key personnel of the contractor are as follows:

Key Personnel	General Experience	Relevant Experience
Engineer (any of the following: Electrical, Electronics, Automation, Instrumentation, Control)	Minimum 2-years experience in electrical, instrumentation, control and automation with a valid PRC License	2-year experience in installation, testing, commissioning, calibration of level sensors and level displays

Safety officer	Minimum 2-years experience as safety officer. (with valid certifications)	Minimum 2-years experience in safety procedures for electrical installations, and maintenance
Electrician	Minimum 2 years as Electrician	Minimum 1 year in electrical works
Helper	Minimum 2 years as Helper	Minimum 1 year in electrical works

IV. Technical Specifications

Item	Description/ Specifications	
1. Level Sensor/transmitter	Type: Ultrasonic or Radar Measuring range= up to 8meters Accuracy: ±0 to 5 mm Protection: IP67, with instrument sunshade/canopy/cover Non-contact with liquid Suitable for ceiling mounting With mounting accessories	
2. Digital Level Display/controller	Operating voltages:	
	Nominal voltage AC	60 ... 240 VAC 60 Hz
	Nominal voltage DC	12 ... 65 VDC
	Suitable for any of the following: a. wall mounting b. panel mounting c. with its own panel	
	With mounting accessories	

V. Materials Requirements:

Electrical Works

1. Cables for connecting the level sensor to the level display and power source (2-cores 20AWG shielded multiconductor cable)
2. Cable for connecting the level display to the power source (minimum 20AWG THHN)
3. RSC pipe (minimum ½ inch diameter)
4. Instrument sunshade/canopy/cover
5. Pipe fastener
6. Electrical consumables (tapes, lugs, terminals, heat shrink tubes)

Mechanical Works:

1. Angle Bars (½ x ½ x 3/8 inch)
2. PVC tox
3. Riveter / rivets
4. Mounting brackets
5. Bolt and nuts to fix and secure the level sensor, panel board, angle bars (include U-bolts for fastening the angle bar)

VI. Equipment Requirements

Electrical Works

1. Combination pliers
2. Side cutters
3. Screw driver set

4. Wire stripper

Mechanical Works:

1. Angle grinder (220-240VAC)
2. Electric drill and drill bits (220-240VAC)

Civil

1. Concrete coring machine (220-480VAC)

VII. Bill of Quantities

The contractor may refer to the table below for the preparation of the Bill of Quantities. *(Details on the Description column to be appropriately filled-up by the Proponent. No amount should be indicated in the Unit Cost and Total Cost columns.)*

Item No.	Description	Qty	Unit	Unit Cost	Total Cost
1	General Requirements				
	Mobilization/Demobilization				
	Permits and Licenses				
	Safety Requirements				
				Subtotal	
2	Materials				
A.	Electrical works				
	Radar / Ultrasonic Type Level Sensor/transmitter	5	Units		
	Digital Level Display/controller	5	Units		
	20 AWG 2-core shielded multicore cable	120	meters		
	RSC pipes and fittings and fasteners (1/2" diameter)	120	meters		
	20 AWG THHN	25	meters		
	Electrical Consumables (terminals, lugs, heat shrink tubes)	5	sets		
B.	Mechanical works				
	Angle Bar (½ x ½ x 3/8 inch)	25	meters		
	Bolts and nuts	5	sets		
	PVC Tox	5	sets		
	Mounting brackets	5	sets		
	Rivet	5	sets		
C.	Civil Works				
				Subtotal	
3	Labor Cost				
	Engineer	1	Personnel		
	Safety Officer	1	Personnel		
	Electrician	1	Personnel		
	Helpers	2	Personnel		
				Subtotal	
4	Equipment				
	Angle Grinder	1	Unit		

	Electric drill	1	Unit		
	Concrete Coring Machine (if deemed necessary)	1	Unit		
	Scaffolding	1	Set		
				Subtotal	
5	Mark up				
				Subtotal	
6	Total Project Cost				
7	Value Added Tax				
8	TOTAL PROJECT COST (Inclusive of all taxes)				

VIII. Project Execution Requirements:

1. A site visit must be conducted by the Contractor before delivery to identify the necessary tools and materials needed during delivery and installation.
2. Five (5) sets of radar/ultrasonic type level sensors and displays/controllers must be delivered.
3. The Contractor must provide complete manuals, including Operator's Manual and Service Manual.
4. The Contractor must provide necessary Certificates, such as Calibration Certificate and Product Certification/Qualification Certificate.
5. The Contractor must provide all necessary tools and equipment during installations.
6. The Contractor shall provide all materials needed for the complete execution of the work.

A. Methodology Requirements:

1. The contractor shall perform all but not limited to works indicated below to execute the project:
Electrical

- The radar/ultrasonic type level sensor/transmitter should be mounted either inside or on the tank that provides the most accurate level reading.
- Instrument sunshades/covers must be provided to protect the devices/instruments from any weather conditions.
- Devices/instruments that are exposed to weather conditions should be equipped with liquid-tight connectors to prevent liquid ingress.
- The cables running from the level sensor/transmitter up to the panel boards in the control rooms must be protected by electrical conduit.
- RSC pipes connecting the bases of tanks to control rooms must be buried at least 6 inches below the soil surface or deeper.
- Each level display/controller must have its own power disconnecting device for safety during maintenance and repairs.
- If the voltage supply required is not 460 VAC 60Hz, the contractor shall provide and install its panel mount transformer and/or AC-DC converters and power supplies to power the level displays/controllers and level sensors/transmitters.
- The Contractor shall provide proper grounding to the instruments to prevent electrical fluctuations and protect from electrical disturbances.
- The Contractor shall provide over and under voltage protective devices and surge protective devices for each assembly of level sensor and level display.

Mechanical

- The RSC pipes positioned along the tank surfaces must be securely fastened to the angle bars.
- The angle bars should be attached to the tank without drilling the tank surfaces, and they should not be fastened on the vertical ladder.
- The radar/ultrasonic type level sensors/transmitters must be mounted exclusively on the ceiling of the tanks.
- The tank concrete walls must not be drilled, bored, or cored.

Civil

- To achieve optimal precision in measuring tank levels, the use of concrete coring may be necessary. If deemed necessary, the coring procedure should be carried out on the tank ceiling. Conversely, if it is determined that coring is unnecessary, it may be omitted.
- Efforts should be made to minimize contact with reinforced steel bars during concrete coring operations to prevent any potential damage or obstruction to the equipment or the structure.

B. General Conditions

1. The Contractor must conduct a joint inspection with PNOC to identify the specific works required for the project.
2. The Contractor must inspect and evaluate the project site and its surroundings to determine the necessary labor, materials, equipment, facilities, and services required for the project.
3. The Contractor must secure the required surety, performance, and guarantee bonds before commencing work.
4. The Contractor must provide proper training and safety orientation to all personnel involved in the project before commencing work.
5. The Contractor must coordinate all project activities and work with PNOC for proper monitoring and coordination.
6. The Contractor must commence work on the agreed Start Date and follow the program of work submitted by the Contractor, updated with PNOC's approval, to complete the project by the completion date indicated in the Scope of Work.
7. The Contractor is liable for any fire, accident claims, or other related claims arising from injuries or damages that may occur during the project's execution.
8. The Contractor must hold PNOC and its personnel free from any and all liabilities to persons or damages to property caused by the Contractor, including any expenses incurred by PNOC and its personnel in defending any claims or suits.
9. The Contractor is responsible for the cost of any rework or restoration of damaged properties due to poor workmanship or negligence.
10. The Contractor must comply with all standard health and safety requirements, including the use of personal protective equipment, installation of safety signage, proper ID, and adherence to company safety and security rules and regulations.
11. The project work must be executed in a thorough manner throughout the project timeline to PNOC's satisfaction, as represented by its engineers and supervisors, who will jointly interpret the scope of work and its conditions and have the authority to reject any work, method of accomplishing every part of work, or material used that are not in accordance with the specifications or deemed disadvantageous to PNOC.
12. The Contractor is liable for all direct and consequential damages resulting from any failure to perform the work in accordance with the schedule and the contract documents' terms and conditions.

C. Site Possession

1. The Contractor must confirm that a site inspection has been conducted to ensure that the nature, extent, and cost of the required work are fully understood. PNOC will not be responsible for any costs or expenses incurred due to the Contractor's failure to accurately examine present and future factors that may affect the cost of execution.
2. The Contractor must coordinate tapping of equipment and other related work with PNOC's designated representative to ensure provision of electrical power source for outlets.

3. The Contractor will be held liable for all direct and consequential damages resulting from any failure to perform the work in accordance with the schedule and with the terms and conditions of the contract documents.
4. PNOC will designate a specific area to be used by the Contractor as temporary facilities/storage area/administration area in connection with the project.

IX. WARRANTY and MAINTENANCE PROVISIONS:

1. Warranty

The supplier warrants that the equipment and materials supplied under this contract shall be free from defects in materials and workmanship for a period of one (1) year from the date of acceptance testing. In the event that any defects are discovered during the warranty period, the supplier shall promptly repair or replace the defective equipment or materials at its own expense.

2. Maintenance

- a. The supplier shall provide maintenance services for the equipment supplied under this contract for a period of one (1) year following the acceptance testing. The maintenance services shall include calibration, preventive maintenance, corrective maintenance, and emergency maintenance as necessary to ensure the proper operation of the equipment.
- b. The supplier shall provide a maintenance plan, including the scope of maintenance, the maintenance procedures, and the maintenance schedule. The supplier shall also provide a report on the results of the maintenance services and any corrective actions taken to address any issues or concerns identified during the maintenance.

X. COMPLETION OF WORK

1. Delivery, Installation, Testing and Commission must be completed within thirty (30) calendar days reckoned from the date of receipt of the Notice to Proceed.
2. Acceptance Testing
The supplier shall conduct acceptance testing to demonstrate that the equipment and materials supplied under this contract comply with the technical specifications and other requirements stated in this Terms of Reference. The acceptance testing shall be conducted in the presence of the PNOC representative and shall include the following:
 - a. Functional Testing
The supplier shall conduct functional testing of the equipment to ensure that it is operating as specified. The supplier shall demonstrate the proper operation of the level sensors and level displays and shall provide a demonstration of their features and functions.
 - b. Performance Testing
The supplier shall conduct performance testing of the equipment to ensure that it meets the performance requirements stated in the technical specifications. The supplier shall demonstrate the accuracy of the level measurements and shall provide a comparison of the readings to a reference measurement. The supplier shall also provide a report on the results of the acceptance testing and any corrective actions taken to address any issues or concerns identified during the testing.
3. Work should start from 8:00 AM to 5:00 PM weekdays and weekends including holidays.

Note: Delays due to work stoppage ordered by PNOC shall be counted against the set completion date.

DEFINITION OF SIMILAR PROJECT:

- A project that involves the delivery and installation of liquid level sensors, level transmitters, level displays or indicators

LOT No.	UOM	Technical Specifications	QTY	Total Quotation Amount
1	lot	Supply, Delivery, Installation, Testing and Commissioning of Level Sensors (ABC: PhP849,500.00)	1	
Contract Duration:		Thirty (30) Calendar days reckoned from the date of receipt of Notice to Proceed		

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 : _____