



BAGONG PILIPINAS

PHILIPPINE
PORTS
AUTHORITY



REQUEST FOR QUOTATION (RFQ)

1. The Philippine Ports Authority - Port Management Office of Batangas (PPA-PMOB) through its Bids and Awards Committee (BAC) will undertake procurement for **Supply, Delivery, Installation and Commissioning of Hybrid Inverter and Lithium Iron Phosphate Batteries (LifePO4) Wall Mounted at VTMS Radar Station 3 located at Barangay Sinandigan, Escarceo, Puerto Galera, Oriental Mindoro of PPA, PMO Batangas** in accordance with **Section 53.9, Small Value Procurement**, of the 2016 Revised Implementing Rules and Regulations of Republic Act No. 9184. The details of the project are the following:

- a. Name of Project : **Supply, Delivery, Installation and Commissioning of Hybrid Inverter and Lithium Iron Phosphate Batteries (LifePO4) Wall Mounted at VTMS Radar Station 3 located at Barangay Sinandigan, Escarceo, Puerto Galera, Oriental Mindoro of PPA, PMO Batangas**
- b. Reference No. : **BAC-BGS-033E-2023**
- c. Approved Budget : **Php 997,920.00**
for the Contract (ABC)
- d. Source of Fund : **PPA Corporate Funds**
- e. Item Description :

Item No.	Qty.	Unit	Item Description / Technical Specification	Unit Cost	Total Cost
1	2	set	5.12kW Lithium Iron Phosphate Batteries (Wall Mounted)	214,364.64	428,729.28
2	1	unit	12kW Hybrid Inverter	569,190.72	569,190.72
<i>Note: Including Delivery/Mobilization/Demobilization and Installation and Commissioning</i>					
See Technical Specifications – Annex "A"					
TOTAL AMOUNT (in Php)					997,920.00

Quotations received in excess of the Approved Budget for the Contract (ABC) shall be automatically rejected.


- f. Delivery Site : **Radar Station 3, Brgy. Sinandigan, Puerto Galera, Oriental Mindoro**
- g. Delivery Period : Within **TEN (10)** calendar days upon receipt of a written Notice or Purchase Order (P.O.), whichever is applicable. Administrative penalties pursuant to Sec. 69 of the 2016 Revised IRR of R.A. 9184 shall be imposed for non-delivery without reason.
2. The duly conformed **Technical Specifications (Annex "A")**, duly accomplished **Price Quotation Form (Annex "B")**, **Omnibus Sworn Statement (Annex "C")** and **Certificate of Inspection** together with the **CERTIFIED TRUE COPY** of the following documents: a) Valid Mayor's / Business permit; b) Valid PhilGEPS Registration / Registration Number; c) Latest Income and Business Tax Return, shall be submitted in a sealed envelope by mail, courier or hand carried to the **PMOB-BAC on or before 9:00 a.m. of 23 October 2023** at the **Legal Unit, 6/F, PPA Administration Building, Port Access Road, Calicanto, Batangas City** addressed to:

COMPANY: (Indicate the name of the Company)
NAME OF PROJECT: (Indicate the name of the Project)

JEFREN P. PANGANIBAN
Chairperson, PMOB-BAC
Philippine Ports Authority
Port Management Office of Batangas
PPA Administration Building,
Port Access Road, Calicanto,
Batangas City 4200

Failure to comply with the instructions and to submit the required documents shall be ground for disqualification.

3. All quotations shall be inclusive of the applicable Value Added Tax (VAT) and shall be valid for a period of ninety (90) calendar days from the deadline of submission of quotations
4. Any interlineations, erasures or overwriting shall be valid only if they are signed or initialed by the signatory or his/her duly authorized representative/s.
5. Liquidated damages equivalent to one tenth (1/10) of one percent (1%) of the value of Purchase Order not completed within the prescribed completion period shall be imposed per day to day of delay. The PPA may rescind the agreement once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of purchase order, without prejudice to other courses of action and remedies open to it.
6. The project shall be awarded to the winning supplier determined to be the Single or Lowest Calculated and Responsive Quotation.
7. Prospective bidder shall be a duly licensed Filipino citizens/sole proprietorship; partnerships, organizations, cooperatives duly organized under laws of the Philippines or a joint venture with at least sixty percent (60%) interest or outstanding capital stock belongs to Filipino Business partner.
8. A warranty security shall be required from the winning bidder for a minimum period of three (3) months, in the case of Expendable Supplies, or a minimum period of one (1) year, in the case of Non-expendable Supplies, after acceptance by the Procuring entity of the delivered supplies. The obligation for the warranty shall be covered by either retention money in an amount equivalent to at least one percent (1%) of payment, or a special bank guarantee equivalent to at least one percent (1%) of the total contract price. The said amounts shall only be released after the lapse of the warranty period. Provided, however, that the supplies delivered are free from patent and latent defects.
9. The contractor/service provider must have a functional OSH policy and program as provided in pertinent rules and regulations.
10. For the information, you may contact **Genesis Arn A Bool**, Head, BAC Secretariat at Telephone No. **(043) 723-7214**.


JEFREN P. PANGANIBAN
Chairperson, PMOB-BAC

TECHNICAL SPECIFICATIONS

Supply, Delivery, Installation and Commissioning of 12 kilowatts Hybrid Inverter and 10 kilowatts Lithium iron phosphate Batteries (LifePO4) Wall mounted at VTMS Radar Station 3 located at Barangay Sinandigan, Escarceo, Puerto Galera, Or. Mindoro of PPA, Port Management Office of Batangas

1. INTRODUCTION

Our solar power system with a capacity of 10.6 kilowatts (kW) consisting of 40 sets of polycrystalline solar panel rated 265 watts per panel and storage battery (144 pcs, 2v 500Ah) is used as a primary source of electricity for the equipment operating 24/7 at Radar Station 3 located in Barangay Sinandigan, Escarceo, Puerto Galera, Oriental Mindoro is already defective. The system was installed in 2018 and became the primary source of electricity, it is backed up by existing two (2) units 15 kVA generator sets for the uninterrupted 24/7 continuous operations of the equipment which is used to maintain the navigational efficiency of the vessel passing the Verde Island Traffic Separation Scheme (TSS), ingress and egress of the Batangas bay.

The PMO Batangas in its effort to restore and continually improve the operational capability of the solar power intends to replace and upgrade the existing system by procurement of Hybrid Inverter (three phase) and Lithium iron battery (LifeOP4) for Radar Station 3. Hybrid Inverter, the brain of the power system will manage the charging and discharging of the battery, selecting the appropriate supply of electricity (Solar Panel or Generator Set) and monitoring the status of the electric power system. The Lithium iron (LifePO4) battery is more advantageous compared to the lead acid battery in terms of depth of discharge (DoD), in life span and in charging time. One of the features of hybrid Inverter is the capability of managing multiple inputs thus, we can use the generator set to charge the battery and at the same time supplying electricity to the equipment specially during rainy season when the solar panel is incapable of producing sufficient amount of sun energy to power-up the equipment and when the battery is fully charged the hybrid inverter automatically shuts down the generator set and use the stored energy from the battery to supply electricity to the equipment. In this cycle, we are maximizing the use of battery and the generator sets.

In the new system, we are projecting that the fuel consumption will be reduced by at least fifty percent (50%) within the period of 3-5 years, minimizing the frequency of preventive maintenance and minimizing the carbon dioxide emitted from our generator set. The return of investment (ROI) is approximately in one (1) year period considering twelve (12) hours average daily operation of the solar energy system.

SOLAR POWER SYSTEM SPECIFICATIONS

Brand new one (1) unit Hybrid Inverter (three phase) 12kWatts and two (2) sets Lithium iron phosphate Battery (LifePO4) (total storage of 10kW) which complies with the following minimum requirements:

Specifications of One (1) unit Hybrid Inverter (three phase) 12kWatts	
100% unbalanced output, each phase; Max. output up to 50% rated power	
DC couple and AC couple to retrofit existing solar system	
Max. charging/discharging current of 240A	
Support storing energy from diesel generator	
Battery Input Data	
Battery Type	Lithium (Li-Ion)
Max. Charging Current (A)	240
Max. Discharging Current (A)	240
External Temperature Sensor	Yes
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
PV String Input Data	
Max. DC Input Power (W)	15600
Start-up Voltage (V)	160
MPPT Voltage Range (V)	200-650
AC Output Data	
Rated AC Output and UPS Power (W)	12000
Peak Power (off grid)	2 time of rated power, 10 S
Power Factor	0.8 leading to 0.8 lagging
AC Output Rated Current (A)	18.2/17.4
Max. AC Current	27.3/26.1
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220,230
Grid Type	Three Phase
Efficiency	
Max. Efficiency	97.60%
MPPT Efficiency	99.90%
Protection	
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection
Output Overvoltage Protection	DC Type II / AC Type III
Certification and Standards	
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
General Data	
Operating Temperature Range (°C)	-40~60°C, >45°C derating

Cooling	Smart cooling
Communication with BMS	RS485; CAN
Installation Style	Wall-mounted
Warranty	5 years

Specifications of Two (2) sets Lithium Iron Phosphate Battery (LifePO4) Wall Mounted	
Configuration	2P165
Nominal Voltage (V)	51.2V
Working Voltage (V)	42-58.4V
Nominal Capacity (Ah)	100Ah
Rated Energy (kWh)	5.12kWh
Maximum Charging Current	100A@25(+,-) °C
Maximum Discharge Current	100A@25(+,-) °C
Indication Light	Yes, show battery status
LCD screen	Yes, show battery information
Cycle Life	6000cycles @25°C 50A charge and discharge current 70% standard Capacity 90% DoD
Warranty	Three (3) years
Mounting Bracket	Yes, wall mounted
P+/P- Terminals	Yes, connect to equipment, connect to other battery pack for capacity expansion

Additional Requirements:

1. The new hybrid solar inverter and lithium battery must be compatible with the existing solar panel with the following specifications:

Model No.	TYP265W (Poly crystalline)
Rated Maximum Power	265 W
Quantity	40 pcs
Maximum Power	Voltage: 30V – Current: 8.33A
Open Circuit Voltage (Voc)	36V
Short Circuit Current (Isc)	9.17 A
Maximum System Voltage	1000V

2. The new hybrid solar inverter and lithium battery must be compatible with existing Brushless AC Generator Set. To wit;

Make:	Denyo	Engine Make:	Kubota
Model:	DCA 15 ESK DA	Model	: D1703 KB
Rated Output:	15KVA Silent Type	Output	: 14.7kW 1800min
Phase:	3-phase (4 wire);	Fuel	: Diesel Fuel
Rated Voltage:	220V (60 Hz)		
Rated Current:	39.4A		

3. Manual, colored brochure / catalogue (in English language) of the actual unit to be supplied.
4. Shall conduct site inspection at Radar Station 3, Barangay Sinandigan, Escarceo, Puerto Galera, Oriental Mindoro and to be certified by the VTS Division Manager before submission of Bid Documents. The certificate of inspection is part and partial of the bid documents required for submission in the instruction to bidder (ITB).

2. SCOPE OF WORKS

- 2.1 Assessing, checking and testing of Solar Power System at Radar Station 3, Barangay Sinandigan, Escarceo, Puerto Galera, Oriental Mindoro.
- 2.2 Supply and Delivery of new One (1) unit hybrid solar inverter and Two (2) sets lithium solar batteries shall be made during office hours at the PPA Administration Building, Port Access Road, Calicanto, Batangas City for inspection.
- 2.3 Dismantling, pullout and hauling of the defective One (1) unit solar inverter and 144pcs (2V 500AH) lead acid battery to PPA Admin Building.
- 2.4 Delivery and Installation of the new One (1) unit hybrid solar inverter and Two (2) sets lithium solar batteries and its accessories at Radar Station 3, Barangay Sinandigan, Escarceo, Puerto Galera, Oriental Mindoro.
- 2.5 Rewiring of electrical connections, if necessary.
- 2.6 Calibration, Testing and Commissioning in the presence of PPA representatives.
- 2.7 Conduct of orientation and training on basic troubleshooting and maintenance of the new system;
- 2.8 All waste materials used in the above-mentioned project shall be turned over to the PPA.
- 2.9 The Supply, Delivery, Installation and Commissioning of One (1) unit hybrid solar inverter and Two (2) sets lithium solar batteries shall be conducted **within seven (7) days upon receipt of Notice to Proceed.**

LOCATION	QUANTITY	DESCRIPTION
Radar Station 3 located at Barangay Sinandigan, Escarceo, Puerto Galera, Oriental Mindoro	1 unit	3 phase 12kw, Hybrid Inverter
	2 sets	5.12kw Lithium Iron Phosphate Battery (LifePO4)

3. APPROVED BUDGET FOR THE CONTRACT (ABC)

The ABC is **Nine Hundred Ninety Seven Thousand Nine Hundred Twenty (PhP 997,920.00), PHILIPPINE CURENCY** inclusive of VAT.

4. PERFORMANCE SECURITY

To guarantee the faithful performance of the winning SUPPLIER of its obligations under the contract, it shall post a Performance Security in any of the following forms:

Form of Security	Minimum Amount % of Total Contract Price
Cash, certified check, cashier's check, manager's check, bank draft or irrevocable letter of credit	Five (5) Percent
Bank guarantee	Five (5) Percent
Surety Bond	Thirty (30) Percent

5. WARRANTY

The warranty period is either suppliers or manufacturer's warranty whichever is longer to be reckoned from the date of acceptance by PPA-PMOB. Any parts found to be defective or any deficiency incurred within the specified warranty period shall be repaired or replaced by the winning bidder free of charge and without any cost to PPA-PMOB.

The obligation for the warranty shall be covered by either retention money in an amount equivalent to at least one percent (1%) of the total contract price or a special bank guarantee of the same amount. The said amounts shall only be released after the lapse of the warranty period. Provided however, that the units delivered are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

6. TERMS AND CONDITIONS

- 6.1 The winning bidder shall be liable for any damages and defects on the apparatus and equipment that maybe caused on the system as the result of their installation, calibration, testing and commissioning.
- 6.2 Supply of skilled labor, tools, materials including electrical wiring and control cable, etc. and test equipment necessary for installation, calibration, testing and commissioning of the new hybrid solar inverter and lithium solar batteries and removal/dismantling, pullout and hauling of the defective solar inverter and lead acid battery and waste materials from Radar Station 3 to PPA Admin Building shall be provided at own expense of the winning bidder.

7. OBLIGATIONS AND RESPONSIBILITIES OF THE WINNING BIDDER

- 7.1 The winning bidder agrees and binds itself to hold PPA free and harmless from any damage, claims, liabilities or legal actions which may be brought by any third party by reason of the Contract or Purchase Order of the project.
- 7.2 The winning bidder shall strictly comply with all the existing PPA rules, regulations, policies and guidelines.
- 7.3 The parties, likewise agree that the employees of the winning bidder are not employees of the PPA-PMOB where the PPA-PMOB shall not in any way be liable or responsible for any physical injury or damages, including death sustained or caused by any of the employees of the service provider whether or not occurring during the performance of their duties. The service provider agrees and binds itself to indemnify the PPA-PMOB for whatever injuries or damages caused or occasioned or contributed to by failure, negligence or conduct of the service provider arising out of or in connection with or on the occasion of the performance of this agreement. The winning bidder shall at all times, stand solely liable and responsible for the enforcement of, and compliance with all existing laws, rules and regulation and binds itself to save and hold PPA-PMOB free and harmless from any and all liabilities, losses, damages, judgments, fines and penalties arising from and by reason of this Technical Specifications and its implementation.

8. RIGHTS OF PHILIPPINE PORTS AUTHORITY

- 8.1 Grant the winning bidder the sole and exclusive contract for the subject project.


9. PARAMETERS OF PAYMENT

For and in consideration of the full, satisfactory and faithful performance by the winning bidder of its undertaking defined and provided under this Technical Specifications and contract documents, and upon acceptance of PPA through its authorized personnel, PPA agrees to pay the full amount prescribed by the contract signed, inclusive of the 12% VAT, subject however to existing accounting and auditing rules and regulations.


10. PROJECT PROCUREMENT AND REQUIREMENTS AND PROCEDURES

The procurement of the project shall be made through Alternative Mode of Procurement particularly Small Value Procurement in accordance with Sec. 53.9 of the 2016 Revised IRR of RA 9184.

Prepared by:


MARGARITA EMELYN B. VILLAMOR
End-user / Division Manager A, Administrative Division

Noted:


JOSELITO SINOCRUZ PhD
Port Manager

Conforme:

Authorized Signatory

Price Quotation Form

Date: _____

JEFREN P. PANGANIBAN
 Chairperson, PMOB-BAC
 Philippine Ports Authority
 Port Management Office of Batangas
 PPA Administration Building,
 Port Access Road, Calicanto,
 Batangas City 4200

Dear **Mr. Panganiban**,

We hereby submit our quotation for the procurement of the project, entitled: **Supply, Delivery, Installation and Commissioning of Hybrid Inverter and Lithium Iron Phosphate Batteries (LifePO4) Wall Mounted at VTMS Radar Station 3 located at Barangay Sinandigan, Escarceo, Puerto Galera, Oriental Mindoro of PPA, PMO Batangas** to wit:

Item No.	Qty.	Unit	Item Description / Technical Specification	Unit Cost	Total Cost
1	2	set	5.12kW Lithium Iron Phosphate Batteries (Wall Mounted)		
2	1	unit	12kW Hybrid Inverter		
<i>Note: Including Delivery/Mobilization/Demobilization and Installation and Commissioning</i>					
Per Technical Specifications					
TOTAL AMOUNT (in Php)					

The above quoted prices are inclusive of all costs and applicable taxes.

Very truly yours,

Name / Position / Signature of Authorized Representative Over Printed Name

Name of Company

Company Address

Contact Number

Email Address

Omnibus Sworn Statement

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, _____, of legal age, _____, _____, and residing at
[Name of Affiant] [Civil Status] [Nationality]

[Address of Affiant]

after having been duly sworn in accordance with law, do hereby depose and state that:

1. Select one, delete the other:

If a sole proprietorship: I am the sole proprietor or authorized representative of _____
[Name of Bidder] with office address at _____
[address of Bidder]

If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated
representative of _____ with
[Name of Bidder] office address at _____
[address of Bidder]

2. Select one, delete the other:

If a sole proprietorship: As the owner and sole proprietor, or authorized representative of _____
[Name of Bidder], I have full power and authority to do, execute and perform any and all
acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for _____
[Name of the Project] of the _____
[Name of the Procuring Entity] as shown in the attached duly notarized Special Power of Attorney;

If a partnership, corporation, cooperative, or joint venture: I am granted full power and authority to do, execute
and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing
contract for _____
[Name of the Project] of the _____
[Name of the Procuring Entity], as shown in the attached _____
[state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)];

3. _____ is not "blacklisted" or barred from bidding by the
[Name of Bidder] Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign
government/foreign or international financing institution whose blacklisting rules have been recognized by the
Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or
controlling interest with another blacklisted person or entity as defined and approved for in the Uniform
Guidelines on Blacklisting;

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the
original, complete, and all statements and information provided therein are true and correct;

5. _____ is authorizing the Head of the Procuring Entity
[Name of Bidder] or its duly authorized representative(s) to verify all the documents submitted;

6. Select one, delete the rest:

If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity,
members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the
head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or
affinity up to the third civil degree;

If a partnership or cooperative: None of the officers and members of _____
[Name of Bidder]

is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a corporation or joint venture: None of the officers, directors, and controlling stockholders of _____
[Name of Bidder]

members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. _____
[Name of Bidder] complies with existing labor laws and standards; and
8. _____
[Name of Bidder] is aware of and has undertaken the following responsibilities as a Bidder:
- a) Carefully examine all of the Bidding Documents;
 - b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
 - c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the _____
[Name of the Project]
9. _____
[Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of _____, 20__ at _____, Philippines.

Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN to before me this ___ day of _____ at _____, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her _____, with his/her photograph and signature appearing thereon, [insert type of government identification card used] with no. _____ and his/her Community Tax Certificate No. _____ issued on ___ at _____.

Witness my hand and seal this ___ day of _____.

NAME OF NOTARY PUBLIC

Serial No. of Commission _____

Notary Public for _____ until _____

Roll of Attorneys No. _____

PTR No. _____ [date issued], [place issued]

IBP No. _____ [date issued], [place issued]

Doc. No. _____

Page No. _____

Book No. _____

Series of _____