



SUPPLEMENTAL/BID BULLETIN NO. 1
For LBP-HOBAC-ITB-GS-20210603-02

PROJECT : Precision Airconditioning Unit (PACU) for LANDBANK
Data Center Head Office

IMPLEMENTOR : Procurement Department

DATE : July 30, 2021

This Supplemental/Bid Bulletin is issued to modify, amend and/or clarify certain items in the Bid Documents. This shall form an integral part of the Bid Documents.

Modifications, amendments and/or clarifications:

- 1) The bidder/s are encouraged to use the Bid Securing Declaration as Bid Security.
- 2) The Terms of Reference (Annex D), Bill of Quantities (Annex E), Item No. 1 of Invitation to Bid, Item 2.1 of Instruction to Bidder (Section II), Schedule of Requirements (Section VI), Technical Specifications (Section VII), Schedule of Prices (Form No. 2), and Checklist of Bidding Documents (Item Nos. 11 & 12 of the Eligibility & Technical Components and Item Nos. 2 & 3 for the Financial Component) have been revised. Please see attached revised Annexes D-1 to D-19, E-1 to E-2, and specific sections of the Bidding Documents.


ALWIN I. REYES
Assistant Vice President
Head, Procurement Department and
HOBAC Secretariat



Land Bank of the Philippines

INVITATION TO BID FOR

Precision Air-Conditioning Unit for LANDBANK Data Center Head Office

1. The LAND BANK OF THE PHILIPPINES (LANDBANK), through its 2021 Corporate Operating Budget approved by the Board of Directors intends to apply the total sum of **Twenty Three Million One Hundred Seventy Thousand Pesos Only (PhP 23,170,000.00)** being the Approved Budget for the Contract (ABC) to payments under the contract for Precision Air-Conditioning Unit for LANDBANK Data Center Head Office with Project Identification Number LBP-HOBAC-ITB-GS-20210603-02. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The LANDBANK now invites bids for Precision Air-Conditioning Unit for LANDBANK Data Center Head Office with Project Identification LBP-HOBAC-ITB-GS-20210603-02. The contract period is indicated in Section VI, Schedule of Requirements. Bidders should have completed, within five (5) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

4. Prospective Bidders may obtain further information and/or shortened electronic copy of the Bidding Documents by contacting LANDBANK – Procurement Department at the telephone numbers and email address given below during banking days from 8:00 A.M. to 5:00 P.M.
5. A complete set of Bidding Documents in electronic format may be acquired by interested Bidders on July 16 to August 13, 2021 from LANDBANK – Procurement Department upon payment of the non-refundable Bidding Documents Fee, pursuant to the latest Guidelines issued by the GPPB, in the amount of Eleven Thousand Six Hundred Pesos Only (PhP11,600.00).

The Bidding Documents Fee may be paid at any LANDBANK Branch or through the LANDBANK online payment platform Link.BizPortal provided a Payment Acceptance Order (PAO) is secured first from LANDBANK – Procurement Department. The steps to follow in the payment of the Bidding Documents fee through the LANDBANK Link.BizPortal are found in Annex A of the Bidding Documents.

To obtain a PAO, interested Bidders shall send a request email to lbphobac@mail.landbank.com with subject "PAO – LBP-HOBAC-ITB-GS-20210603-02" as its subject. The specific instructions on how to pay the Bidding Documents Fee and receive the Bidding Documents shall be provided in the reply email of LANDBANK to the interested Bidders.

The Bidding Documents may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the LANDBANK website, provided that Bidders shall pay the corresponding cost of Bidding Documents not later than the submission of their bids.

6. The LANDBANK will hold a Pre-Bid Conference on July 23, 2021 – 2:30 P.M. through videoconferencing using Microsoft (MS) Teams application.

Interested Bidders who would like to participate in the said conference must send a duly filled-up Pre-Bid Conference Registration (PBCR) Form (Annex B of the Bidding Documents) to lbphobac@mail.landbank.com on or before 12:00 noon of July 22, 2021. The PBCR Form can also be downloaded from the PhilGEPS website, LANDBANK website (<https://landbank.com/forms>) or requested from Ms. Lubelle B. Lumabas at landbank2290@gmail.com. Interested Bidders shall state "PBCR - LBP-HOBAC-ITB-GS-20210603-02" in their request email as subject. The specific instructions on how to join the Pre-Bid Conference shall be provided by LANDBANK to the interested Bidders through email.

For new bidders, a briefing on salient provisions of the 2016 Revised Implementing Rules and Regulations of R.A. 9184 and pointers in the preparation of bids shall be conducted on July 21, 2021 – 3:00 P.M through videoconferencing using MS Teams application.

7. All bids shall be submitted electronically on or before the 10:00 A.M. deadline on August 13, 2021. Only electronic bids that are successfully uploaded to the Secure File Transfer Facility (SFTF) of LANDBANK on or before the deadline shall be accepted. Submission of physical bid (hard copy) shall not be accepted. The prescribed procedures in the submission and opening of electronic bids are stated in the Detailed Procedures in Submission and Opening of Electronic Bids (Annexes C-1 to C-8 of the Bidding Documents). Late bids shall not be accepted.
8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 14.

9. Bid opening shall be on August 13, 2021 through videoconferencing using Microsoft (MS) Teams application. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The LANDBANK reserves the right to (a) reject any and all bids at any time prior to the award of the contract; (b) waive any minor formal requirements in the bid documents; (c) accept such bids it may consider to be advantageous and beneficial to the Bank; (d) declare a failure of bidding; or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

Mr. Alwin I. Reyes
Assistant Vice President
Head, Procurement Department
1598 M.H. Del Pilar cor. Dr. J. Quintos Sts.
1004 Malate, Manila
Tel. (+632) 8-522-0000 or 8-551-2200 local 7370
Email lbphobac@mail.landbank.com

(original signed)

ALEX A. LORAYES

Senior Vice President

Chairperson, Bids and Awards Committee

1. Scope of Bid

The Procuring Entity, LANDBANK wishes to receive Bids for the Precision Air-Conditioning Unit for LANDBANK Data Center Head Office with Project Identification Number LBP-HOBAC-ITB-GS-20210603-02.

The Procurement Project (referred to herein as "Project") is composed of one (1) lot, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for 2021 in the amount of **Twenty Three Million One Hundred Seventy Thousand Pesos Only (PhP 23,170,000.00)**.

2.2. The source of funding is the LANDBANK 2021 Corporate Operating Budget.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

Section VI. Schedule of Requirements

The delivery schedule/contract period expressed as weeks/months/years stipulates hereafter a delivery/performance period which is the period within which to deliver the goods or perform the services in the project site/s.

Item Number	Description	Quantity	Delivered, Weeks/Months
1	Precision Air-Conditioning Unit for LANDBANK Data Center Head Office	One (1) Lot (See attached Bill of Quantities for the breakdown of components, Revised Annexes E-1 and E-2)	One hundred fifty (150) calendar days upon receipt of Notice to Proceed.
Delivery Site: LANDBANK Plaza, M.H. del Pilar corner Dr. J. Quintos Street, Malate Manila. Contact Person: Ms. Josie M. Castro Assistant Vice President Data Center Management Department Contact No.: 8-405-7763			

Conforme:

Name of Bidder

Signature Over Printed Name of
Authorized Representative

Position

Section VII - Technical Specifications

<p style="text-align: center;">Specifications</p>	<p style="text-align: center;">Statement of Compliance</p> <p>Bidders must state below either “Comply” or “Not Comply” against each of the individual parameters of each Specification preferably stating the corresponding performance parameter of the product offered.</p> <p>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. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.</p>
<p style="text-align: center;">Precision Air-Conditioning Unit for LANDBANK Data Center Head Office</p> <ol style="list-style-type: none"> 1. Terms of Reference per attached Revised Annexes D-1 to D-19 and Bill of Quantities per attached Revised Annexes E-1 and E-2. 2. The following documents shall be submitted in support of the compliance of the Bid to the technical specifications and other requirements: <ol style="list-style-type: none"> 2.1 Manufacturer’s Certificate stating that: <ul style="list-style-type: none"> ▪ Bidder is a certified partner or reseller of the offered PACU ▪ Model/product being offered is not yet End-of-Life (EOL) for the next five (5) years 	<p style="text-align: center;">Please state here either “Comply” or “Not Comply”</p>

<p>2.2 Curriculum vitae of the following personnel:</p> <ul style="list-style-type: none">▪ At least three (3) technical personnel with a minimum of five (5) years of work experience in installation and maintenance of PACU▪ At least one (1) onsite engineer <p>2.3 Referential document of at least two (2) completed projects including company name, name of project, contact numbers and email address of vendor's clients.</p> <p>2.4 Certificate of Inspection issued by the Head, LANDBANK Data Center Management Department.</p> <p>Non-submission of the above documents may result in the post-disqualification of the bidder.</p>	
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Conforme:

Name of Bidder

Signature over Printed Name of
Authorized Representative

Position

Form No. 2

SCHEDULE OF PRICES
For Goods Offered from Within the Philippines

Name of Bidder _____

Project ID No. LBP-HOBAC-ITB-GS-20210603-02

1	2	3	4	5	6	7	8	9	10
Item	Description	Country of Origin	Quantity	Unit Price (EXW)	Transportation and Insurance and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)
1	Precision Air-Conditioning Unit for LANDBANK Data Center Head Office	_____	One (1) Lot (See attached Bill of Quantities for the breakdown of components, Revised Annexes E-1 and E-2)	PhP _____	PhP _____	PhP _____	PhP _____	PhP _____	PhP _____
Total Cost									PhP _____

Note: Price breakdown should be submitted using the attached Bill of Quantities Form (Revised Annexes E-1 and E-2)

Name of Bidder

Signature over Printed Name of
Authorized Representative

Position

Please credit payment to:

Account Name: _____

Account Number: _____

LBP Branch: _____

Form No. 2

SCHEDULE OF PRICES
For Goods Offered from Abroad

Name of Bidder _____

Project ID No. LBP-HOBAC-ITB-GS-20210603-02

1	2	3	4	5	6	7	8	9	10
Item	Description	Country of Origin	Quantity	Unit Price* (specify port) or CIP named place (specify border point or place of destination)	Transportation and Insurance and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)
1	Precision Air- Conditioning Unit for LANDBANK Data Center Head Office	_____	One (1) Lot (See attached Bill of Quantities for the breakdown of component s, Revised Annexes E- 1 and E-2)	PhP _____	PhP _____	PhP _____	PhP _____	PhP _____	PhP _____
Total Cost									PhP _____

Note: Price breakdown should be submitted using the attached Bill of Quantities Form (Revised Annexes E-1 and E-2)

Name of Bidder

Signature over Printed Name of
Authorized Representative

Position

Please credit payment to:

Account Name: _____

Account Number: _____

LBP Branch: _____

Checklist of Bidding Documents for Procurement of Goods and Services

The documents for each component should be arranged as per this Checklist. Kindly provide guides or dividers with appropriate labels.

Eligibility and Technical Components (PDF File)

- ***The Eligibility and Technical Component shall contain documents sequentially arranged as follows:***

- **Eligibility Documents – Class “A”**

Legal Eligibility Documents

1. Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages); or all of the following:

- Registration Certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives, or any proof of such registration as stated in the Bidding Documents;
- Valid and current mayor's/business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or equivalent document for Exclusive Economic Zones or Areas; and

In cases of recently expired Mayor's/Business permits, it shall be accepted together with the official receipt as proof that the bidder has applied for renewal within the period prescribed by the concerned local government unit: Provided, That the renewed permit shall be submitted as a post-qualification requirement in accordance with Section 34.2 of this IRR.

- Tax Clearance per Executive Order 398, Series of 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Eligibility Documents

2. Duly notarized Secretary's Certificate attesting that the signatory is the duly authorized representative of the prospective bidder, and granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the prospective bidder in the bidding, if the prospective bidder is a corporation, partnership, cooperative, or joint venture or Original Special Power of Attorney of all members of the joint venture giving full power and authority to

its officer to sign the OSS and do acts to represent the Bidder. (sample form - Form No. 7).

3. Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid, within the last five (5) years from the date of submission and receipt of bids. The statement shall include all information required in the sample form (Form No. 3).
4. Statement of the prospective bidder identifying its Single Largest Completed Contract (SLCC) similar to the contract to be bid within the relevant period as provided in the Bidding Documents. The statement shall include all information required in the sample form (Form No. 4).

Financial Eligibility Documents

5. The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission.
6. The prospective bidder's computation for its Net Financial Contracting Capacity (NFCC) following the sample form (Form No. 5), or in the case of Procurement of Goods, a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

○ **Eligibility Documents – Class "B"**

7. Duly signed valid joint venture agreement (JVA), in case the joint venture is already in existence. In the absence of a JVA, duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful shall be included in the bid. Failure to enter into a joint venture in the event of a contract award shall be ground for the forfeiture of the bid security. Each partner of the joint venture shall submit its legal eligibility documents. The submission of technical and financial eligibility documents by any of the joint venture partners constitutes compliance, provided, that the partner responsible to submit the NFCC shall likewise submit the statement of all its ongoing contracts and Audited Financial Statements.
8. For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos, Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.

9. Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.
- **Technical Documents**
 10. Bid Security (if in the form of a Surety Bond, submit also a certification issued by the Insurance Commission).
 11. **Revised Section VI – Schedule of Requirements with signature of bidder's authorized representative.**
 12. **Revised Section VII – Specifications with response on compliance and signature of bidder's authorized representative.**
 13. Duly notarized Omnibus Sworn Statement (OSS) (sample form - Form No.6).
- **Post-Qualification Documents – [The bidder may submit the following documents within five (5) calendar days after receipt of Notice of Post-Qualification]:**
 14. Business Tax Returns per Revenue Regulations 3-2005 (BIR No.2550 Q) VAT or Percentage Tax Returns for the last two (2) quarters filed manually or through EFPS.
 15. Latest Income Tax Return filed manually or through EFPS.
 16. Original copy of Bid Security (if in the form of a Surety Bond, submit also a certification issued by the Insurance Commission).
 17. Original copy of duly notarized Omnibus Sworn Statement (OSS) (sample form - Form No.6).

Financial Component (PDF File)

- ***The Financial Component shall contain documents sequentially arranged as follows:***
 1. Duly filled out Bid Form signed by the Bidder's authorized representative (sample form - Form No.1).
 2. **Duly filled out revised Schedule of Prices signed by the Bidder's authorized representative (sample form - Form No.2).**
 3. **Duly filled out revised Bill of Quantities signed by the Bidder's authorized representative (Annexes E-1 and E-2).**



LANDBANK Precision Air Conditioning Unit (PACU) Replacement for Data Center Headoffice TERMS OF REFERENCE 2021

Instructions on responding to this Terms Of Reference (TOR) Document

- a. The vendor/bidder understands and agrees that the requirements specified in this document are deliverables for the proposed Replacement for PACU System on DATA CENTER Headoffice.
- b. All deliverables, its specifications and functionalities, must be satisfied including its necessary prerequisites without additional cost to the Bank.
- c. The vendor/bidder must answer at the third column whether the proposed Replacement for PACU complies or not—answer must be **YES** or **NO**.
- d. The REMARKS column in the table is to be filled out according to the response in the third column:
 - d.1. If answer to the third column is YES: REMARKS column is to be filled out with the complete and specific reference to the supporting document included in the bidding document to support answer/claim.
 - d.2. If the answer to the third column is NO: REMARKS column is to be filled out with the justifications why the proposed Replacement for PACU cannot meet the specified requirement; include the complete and specific reference to the supporting document included in the bidding document to support answer/claim.
- e. The supporting documents, cited references to the TOR should be indexed or labeled accordingly for easy identification and validation.

CAPABILITY		REQUIREMENT	WILL COMPLY? YES/NO	REMARKS
1. CAPACITY				
Precision Air Conditioning Unit Cooling 30 Tonner Capacity	Unit Quantity: One (1)			
	The proposed precision cooling must have a total Cooling Capacity: MAXIMUM: 105KW MINIMUM: 15KW			
	The proposed precision cooling must have a Sensible Cooling Capacity: MAXIMUM: 86KW MINIMUM: 15KW			
Dry Cooler Cooling Capacity	Unit Quantity: Two (2)			
	The proposed dry cooler must have a Heat Rejection Capacity: MAXIMUM: 70KW			

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2. PERFORMANCE			
PACU Power Supply	The proposed precision cooling must have a power supply of 460V/3Ph/60Hz		
Air Flow	Downblast		
Air Flow Rate	The proposed precision cooling must have an airflow rate of 20,700 CMH		
Return Air Condition	The proposed precision cooling must be capable of at least a temperature of 24C		
	The proposed precision cooling must have a relative humidity of at least 50% RH		
Supply Air Condition	The proposed precision cooling must have a temperature of at least <11C		
	The proposed precision cooling must have a relative humidity of at least <97% RH		
PACU Energy Efficiency Ratio (Excluding Condensers)	The proposed precision cooling must have at least a Maximum Capacity at 3.43		
	The proposed precision cooling must have at least a Medium Capacity at 3.45		
	The proposed precision cooling must have at least a Minimum Capacity at 2.11		
Unit Power Consumption (Excluding Condensers)	The proposed precision cooling must have at least a Maximum Capacity at 32.08		
	The proposed precision cooling must have at least a Medium Capacity at 18.66		
	The proposed precision cooling must have at least a Minimum Capacity at 7.2KW		

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Condenser	Unit Quantity: Two (2)		
Condenser Type	<i>The proposed Condenser type should be Shell and Tube or Panel with protection against seashore corrosive environment.</i>		
Refrigerant Type	The proposed precision cooling must have a refrigerant type R410a		
Refrigerant Circuit	Unit Quantity: Two (2)		
Compressor Type	The proposed precision cooling must have a compressor type of Brushless Direct Current (DC) compressor with inverter		
Expansion Valve Type	The proposed precision cooling must have an Electronic Expansion Valve		
Air Filter Efficiency	The proposed precision cooling must be a G4		
Fan Type	The proposed precision cooling must have an Electronically Commutated (EC) Fan		
Fans	Unit Quantity: Three (3)		
Static Pressure	The proposed precision cooling must have a static pressure of 30 Pa		
Fan Input Power	The proposed precision cooling must have a fan input power of < 3.85KW		
Electric Reheat Type	The proposed precision cooling must have a Low thermal inertia electric heater Safety thermostat to prevent overheating		
Electric Reheat Capacity	The proposed precision cooling must have an electric reheat capacity of at least 24KW		
Humidifier Type	The proposed precision cooling must have a Steam humidifier with immersed electrodes		
Humidifier	Unit Quantity: One (1)		
Humidifier Capacity	The proposed precision cooling must have a Maximum of 15kg/hr		
Humidifier Power Input	The proposed precision cooling must		

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	have a Maximum of 11.4		
PACU Dimension and Weight (excluding Accessories and Condenser)	The proposed precision cooling must have a MAXIMUM Dimension: 2,640mm Width x 875mm Depth x 1990mm Height		
	The proposed precision cooling must weigh less than 750KG		
Pipe Connections/Sizes	The proposed precision cooling must have a Refrigerant Pipe Liquid Line: 3/4" Discharge Line: 1-1/8"		
	Condenser Pipe: Supply Line: 2" Return Line: 2"		
	Humidifier Pipe Size: 3/4"		
	Condensate Drain Pipe: 25mm		
Dry Cooler Performance Data	The proposed precision cooling must have a Dry cooler performance specs: Power Supply: 460V/3PH/60HZ		
	Air Inlet Temperature: 35C		
	Maximum Air Outlet Temperature: 41C		
	Maximum Water Flow Rate: 13 CMH		
	Minimum Capacity: 70KW		
	Minimum Air flow Rate: 39,600 CMH		
	Maximum Water Inlet Temperature: 43C		
Dry Cooler Characteristics	Maximum Water Outlet Temperature: 38C		
	The proposed precision cooling must have a dry cooler characteristics specs: Frame Design: V-Shape Coil		
	Fan Type: EC Fan (Electronically Commutated)		
	Dry Cooler Connections: 2"		
	Coil Type: Copper		
	Fin Type: New magnesium-aluminum alloy with a special surface treatment for highly corrosive (near shoreline)		

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	environment protection		
Dry Cooler Dimension and Weight	The proposed precision cooling must have a MAXIMUM Dimension: 1,200mm Width x 2,850mm Depth x 1,660mm Height		
	The proposed precision cooling must have a MAXIMUM Weight: 425 KG		
Appurtenances	The proposed precision cooling must have a Redundant Pumps		
	The proposed precision cooling must have a Water Fill Tank		
	The proposed precision cooling must have a Water Meter		
	The proposed precision cooling must have a Valves and Strainer		
	The proposed precision cooling must have a Pressure Gauges and Thermometers		
	The proposed precision cooling must have a Flexible Connectors and Flange Connectors		

3. SCALABILITY			
Control System	The proposed precision cooling must have a digital inputs and outputs which, depending on the needs of the system, can be configured with specific features designed to simplify the installation and use of the unit.		
Electronic Fans	The proposed precision cooling must have a modulating the fan speed, units can be adapted to the actual system needs. Pressure or constant air flow management allows the supply of the effective quantity of air necessary to		

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	the system.		
Expansion Valve	The proposed precision cooling must have a valve wide adjustment range, it is possible to ensure the best cooling circuit operation even in the presence of varying thermal loads and under partialization conditions of the cooling capacity delivered by the circuit.		
DC Compressor with Inverter	The proposed precision cooling must have a wide adjustment range, the compressors will automatically adapt to the actual cooling demand, guaranteeing the optimal supply of cooling capacity even in the presence of varying thermal loads.		

4. INTEROPERABILITY AND RELIABILITY			
Control System	<p>The proposed precision cooling must have a control via Simple Network Monitoring Protocol (SNMP), all key components of the unit are continuously supervised, with over 50 different variables that ensure the real-time monitoring of all operating cycles.</p> <p>The wide Full Graphic LCD display, access to all operating parameters is guaranteed in a simple and intuitive way, in addition to icons, progress bars, as well as daily and weekly temperature and humidity charts.</p> <p>The predictive safety systems designed to prevent unwanted shut-down failures and to an advanced system for recording alarms and hours of operation.</p>		
Fans	The proposed precision cooling must have a control exerted via the Simple		

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	<p>Network Monitoring Protocol (SNMP), it is possible to check all the fan operating values, ensuring the maintenance of the required working point via real-time feedback.</p> <p>The control via the Simple Network Monitoring Protocol (SNMP), checking the fans is simple and intuitive. The fan self-routing system facilitates maintenance procedures.</p> <p>The high reliability components and the independent management of each fan, a high level of system reliability can be ensured.</p>		
Expansion Valve	<p>The proposed precision cooling must have an advanced electronic controller, the entire cooling cycle of a unit can be controlled by constantly monitoring the operation conditions of all its components.</p> <p>With an advanced system of adaptive adjustment, difficult circuit calibrations are not necessary. The entire cooling cycle control allows the operation to be monitored without the need to use pressure gauges, probes, etc.</p> <p>With 10 different active safety systems, the cooling circuit locking risk can be reduced by identifying and solving abnormal working conditions in advance.</p>		
Compressor	<p>The proposed precision cooling must have a brushless DC synchronous motor, a wide modulation between 20% and 100% of the delivered cooling capacity is possible. The "High Pressure Shell" (HPS) system allows optimum lubrication of the compressor even at</p>		

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	<p>the lowest speed, separating the oil from the refrigerant directly inside the compressor.</p> <p>The direct control via the Simple Network Monitoring Protocol (SNMP) a continuous monitoring of the compressor operating conditions is possible with direct access from the terminal unit, or remotely via connection to supervision systems and building management systems (BMS).</p> <p>The inverter control system, the brushless DC motor and the "High Pressure Shell" system, it is possible to ensure the system high functional efficiency, minimizing the need to service the cooling circuit.</p>		
Piping	Winning Bidder must provide new condensate drain and water supply tapping points of the new PACU, tapping must be on the nearest comfort room.		
Electrical	Winning Bidder must provide new electrical feeder-line for the new PACU Indoor and ACCU/Outdoor unit		
	Winning Bidder must replace all electrical system of the previous PACU line. Use attached schematic diagram. (Annexes A and B)		
	Winning Bidder must include new electrical conduit for the PACU ACCU/Outdoor unit suitable for outdoor condition		
	Winning Bidder must supply and install necessary and required electrical cables and conduit.		
	Proponent Unit to provide suitable power to accommodate power requirement of new PACU and Intelligent Fan system.		

5. TECHNOLOGY			
Control System	<p>The proposed precision cooling must have a NEW GENERATION ELECTRONIC CONTROL SYSTEM</p> <p>Units of Precision air conditioning range feature an advanced electronic control system, conceived and designed to deliver optimum performance and easier access to information.</p> <p>With specific features dedicated to energy savings and the optimized management of all the unit direct expansion and chilled water operating cycles.</p>		
Fans	<p>The proposed precision cooling must have a HIGH PERFORMANCE, LOW POWER CONSUMPTION ELECTRONIC FANS</p> <p>Units of Precision air conditioning range are equipped with state-of-the-art electronic fans which allow very high-performance levels to be achieved with minimum energy impact.</p> <p>The innovative design of the composite material blade, a 25% energy saving and a 4-5 dB(A) noise reduction are possible, compared to the previous generation of fans.</p>		
Expansion Valve	<p>The proposed precision cooling must have an ELECTRONIC EXPANSION VALVE</p> <p>Units of the Precision air conditioning range are equipped with electronic expansion valves to maximize the performance of direct expansion cooling circuits, especially under partialization conditions.</p>		

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	By optimizing working conditions, it is possible to increase the cooling circuit energy efficiency by more than 40% compared to a system provided with a mechanical thermostatic expansion valve (TEV).		
Compressor	<p>The proposed precision cooling must have a DC COMPRESSOR WITH INVERTER REGULATION</p> <p>The direct expansion units of the Precision air conditioning range can be equipped with DC compressors with inverter regulation which allow the delivered cooling capacity to be varied, maximizing the motor performance and reducing energy consumption.</p> <p>By optimizing the working conditions and efficiency of the brushless DC motor, it is possible to reduce the annual energy consumption by 35% in partial load. It is moreover possible to increase the energy efficiency ratio (EER) by over 25% compared to a system with a fixed speed compressor.</p>		

6. MANAGEMENT			
Cooling Management	<p>The proposed precision cooling must have a COOLING CIRCUIT ADVANCED MANAGEMENT SYSTEM</p> <p>Direct expansion Precision air conditioning units are equipped with an innovative control system of the cooling circuit, which allows simplified management, easier maintenance and optimized operational safety.</p> <p>The System allows the display and monitoring of the operating conditions of the whole cooling cycle, from both</p>		

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	<p>the local display and the supervision system as well as Building Management Systems (BMS) and/or Data Center Infrastructure Management System (DCIM) System.</p> <p>The system actively manages 10 different safety function, designed to provide high operational safety.</p> <p>The system makes it possible to significantly simplify all the installation and maintenance procedures of direct expansion units. Using tools to check the conditions of the cooling circuit will be no longer necessary; technicians will be able to easily access all the operating conditions by simply pressing a button on the display.</p> <p>The ability to interface with the major supervision systems and building management systems (BMS), monitoring the entire cycle of a unit will be even easier and quicker.</p>		
Network Management	<p>The proposed precision cooling must have a THE INTELLIGENT LOCAL NETWORK</p> <p>The units of precision air conditioning range are equipped with an innovative control system in a local network (LAN) which allows them to be managed and serviced more easily while improving operational safety.</p> <p>ACTIVE DISTRIBUTION OF WORKLOAD</p> <p>The innovative system allows the concept of local network to be revolutionized. Taking advantage of the modulation capabilities of its</p>		

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	<p>components, this system makes it possible to actively share the workload among all the units in the local network. Compared to the latent redundancy Duty / Stand-by (n+1 or n+n) system, where the backup units were stationary waiting for the onset of a problem, the system allows the units connected to the network to be kept always active.</p> <p>The system of active average of ambient conditions, the system allows the units to work in unison to monitor thermo-hygrometric conditions and air pressure, ensuring there are no "hot spots" due to inactive units.</p>		
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7. QUALIFICATION REQUIREMENTS	DOCUMENTARY REQUIREMENTS		
The bidder must be a certified partner or reseller of the offered PACU	Manufacturer's Certificate		
Must have at least three (3) technical personnel with a minimum of five (5) years' work experience in installation and maintenance of PACU	Curriculum vitae of each personnel		
Must have at least one (1) engineer onsite during LBP maintenance activities			
<i>The Principal/Partner must have completed a Contract for PACU installation in Data Center for one (1) local Universal Bank other than Landbank and one (1) organization from another industry.</i>	<i>Referential documents for at least two (2) completed project, including company name, name of project, contact numbers and email address of vendor's clients.</i>		
Site Survey: Prior to submission of bidding proposal, the vendor must coordinate with LANDBANK-DCMD to conduct a site survey at Data Center Headoffice for PACU installation sites. The survey	Non-disclosure Agreement (NDA) signed by the bidder's authorized representative must be submitted two (2) calendar days prior to the		

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<p>is necessary to ensure that the PACU will be able to function properly and according to expectation.</p> <p>The site inspection will be conducted at least five (5) calendar days before opening of bids from Monday to Friday 8:00am-3pm. Contact persons are Arnhel Alfred Ballocanag and Dyemmarie Sabanal with email addresses aballocanag@mail.landbank.com and dsabanal@mail. landbank.com, respectively. Both can be contacted thru phone number 8-5220000 local 7763.</p>	<p>conduct of site inspection thru email.</p> <p>Certificate of Inspection will be issued by DCMD Head for the bidders who will conduct site inspection which shall be form part of the bid proposal.</p>		
<p><i>The appliance/solution model/product line should not be End-of-Life (EOL) for the next five (5) years.</i></p>	<p><i>Manufacturer's Certificate that the model/product should not be End-of-Life (EOL) for the next five (5) years.</i></p>		
<p>8. SCOPE OF WORK</p>			
<p>General Scope</p>	<p>The Winning Bidder shall supply, deliver, install and configure complete working precision air conditioning systems that sufficiently satisfy the required capacity and specification.</p>		
<p>Dismantling and Hauling out of Existing Units</p>	<p>The Winning Bidder shall include dismantling and proper disposal of existing precision air conditioning unit including all accessories, electrical and mechanical piping related to the dismantled unit with the approval and supervision of LANDBANK.</p> <p>The Winning Bidder must deliver old PACU unit and accessories and piping to the LANDBANK Antipolo Warehouse.</p>		
<p>Project Management</p>	<p>The Winning Bidder shall provide project management services during</p>		

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	the implementation of this project, and update LANDBANK on weekly progress report.		
Operational Interruption	The Winning Bidder shall implement this project with MINIMAL to NO operational interruption and bidder shall provide enough cooling and humidification during implementation of this project to prevent heating and moisture problems during implementation.		
Bonds and Insurances	Contractor's All Risk Insurance - 100% of contract value		

9. WARRANTY AND SUPPORT			
All Equipment Warranty	The proposed precision cooling must have a warranty of three (3) years from equipment start-up and commissioning.		
Technical Support	Support: 24X7 telephone, email, remote, and on-site support for three (3) years.		
	Support must always be available and accessible on demand as part of the support and maintenance agreement for three (3) years.		
Maintenance Cost	After the three (3) years warranty, Maintenance Agreement (MA) cost must not be more than 15% of the purchase cost, VAT included, and should be in Philippine Peso		

10. TRAININGS AND OTHER REQUIREMENTS			
User Operation Training	The Winning Bidder shall provide administration training and knowledge		

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		transfer for a maximum of ten (10) DCMD personnel and five (5) FMD personnel to enable the team to manage day-to-day operations of the PACU installed. Training shall be onsite for at least one (1) day and in batches, depending on the availability of both parties and certain government restrictions due to COVID protocols and will be provided with Certificate of Completion.		
Data Center Cooling Best Practices Training		The Winning Bidder shall provide Data Center Cooling Best Practices Training to the involve teams of LANDBANK to improve learnings and update on the best practices, advancement and technologies used in data center cooling.		
Bank's Compliance		The Winning Bidder must comply with the requirements in relation to Third Party/Vendor Assessment conducted by the Bank. Must submit [eg. Latest Financial Statement (FS), Business Continuity Plan (BCP) that are related to the Bank, and List of Updated Technical Support (include name, contact numbers and email address)].		

11. GENERAL AVAILABILITY			
Product Offering	Proposed solution model should be brand new		
	The proposed model/product should be verifiable via published public documents or thru the product's website		

12. PROJECT TIMELINE			
Project Timeline	One Hundred Fifty (150) calendar days upon receipt of Notice to Proceed		

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	(NTP).		
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13. DOCUMENTATION			
Documentation	Brochure		
	Manuals		
	Performance Data		
	Methodology		
	Project Timeline/Gantt Chart		
	Spare Parts List		
	Maintenance Scope of Works		
	Electrical Single Line Diagram		
	Mechanical Schematic Diagram		
	Shop Drawing and Layouts		
Materials and Tools	The Winning Bidder shall submit calibration certificates for all measuring and testing tools. Measuring materials (i.e. Pressure gauge and Thermometers) that will be used in this project requires calibration certificates prior to installation.		
Media and Format	All documentation must be in hard and soft copies; Soft copies must be stored on a compact disk and a USB drive; Soft copy documentation must be in a non-editable format.		
Ownership	All documentation shall be the property of the Land Bank of the Philippines and shall reserve the right to reproduce at no additional cost		

14. OTHERS			
Data Center Water Leak Detector	<p><i>Winning bidder must provide and install brand new water leak detector to the perimeter of the Malate Data Center area.</i></p> <p><i>This also includes removal/dismantling of Water Leak Detector</i></p>		

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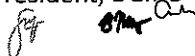
	<p><i>and proper disposal to Antipolo Warehouse together with the old PACU.</i></p> <p><i>Water leak detector must have a display unit to show where exact water leak is located and must have audio and visual alarm.</i></p> <p><i>Winning Bidder must train LANDBANK personnel on the water leak unit.</i></p> <p><i>All water leak detector documentation must be in hard and soft copies; Soft copies must be stored on a USB drive separate from PACU documentation; Soft copy documentation must be in a non-editable format.</i></p>		
Booster Fans	<p><i>Winning Bidder must provide four (4) Aluminum Perforated Panel with dimension of 24" x 24" with Intelligent Temperature Fan system to boost cold air delivery from new PACU-2 to other areas of the Data Center.</i></p>		

15. Delivery Schedule and Payment terms			
Payment Terms	50% upon delivery of products, and 50% upon completion of installation.		
END of Terms of Reference			

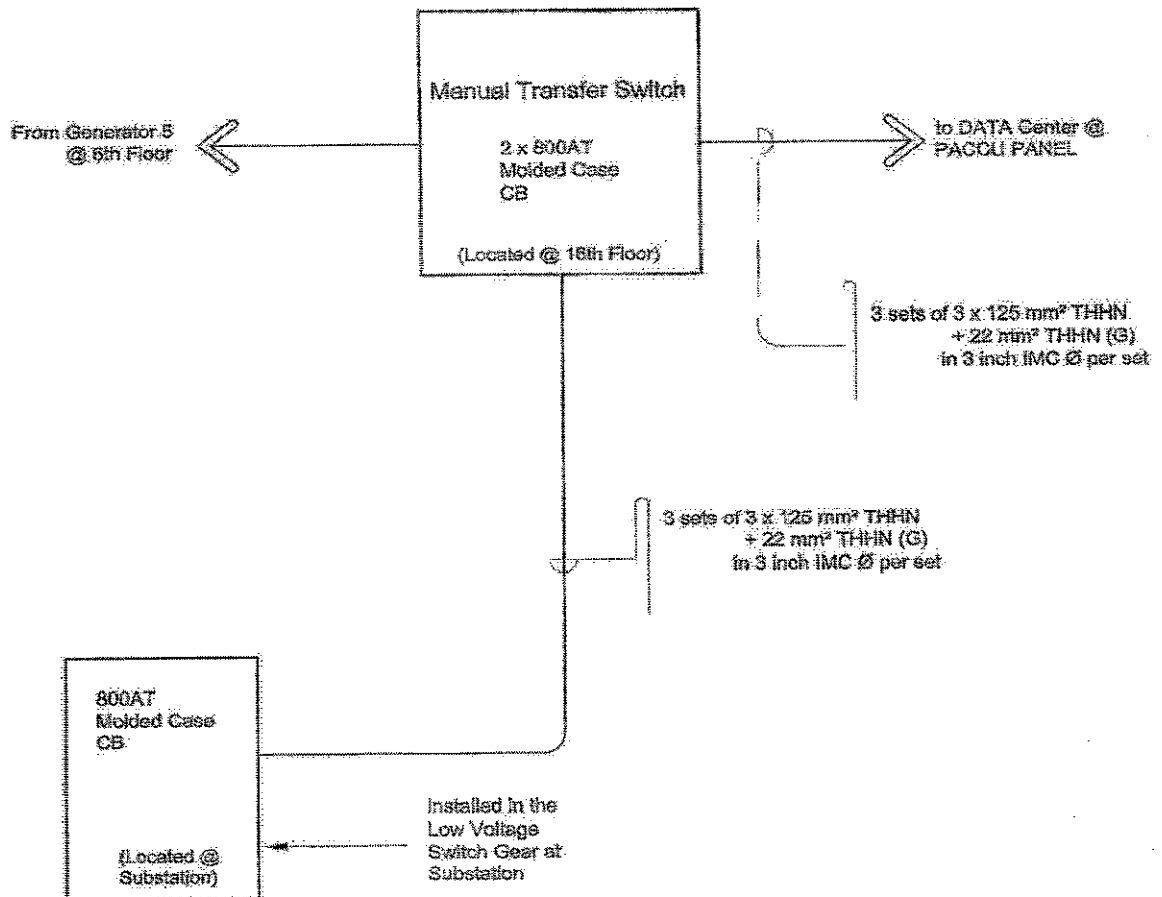
Noted/Approved by:


JOSIE M. CASTRO

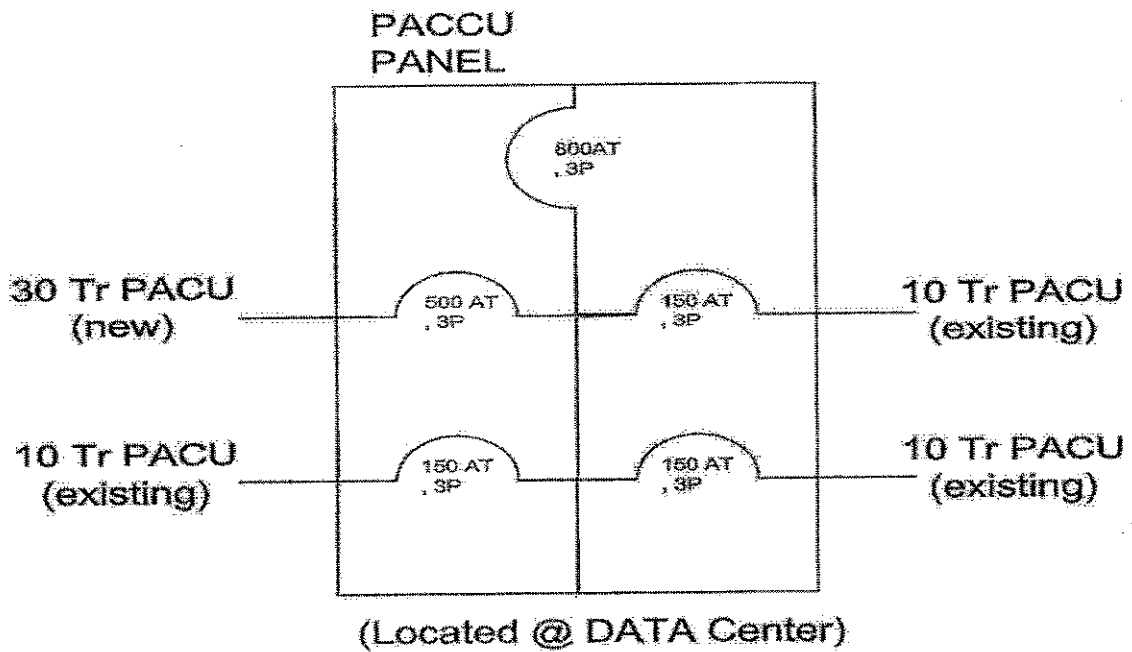
Assistant Vice President, DCMD



Annex A



PROPOSED POWER SUPPLY FOR THE
UPGRADING OF PACCU AT 16TH FLOOR
DATA CENTER



PROPOSED PANELBOARD FOR THE
UPGRADING OF PACCU AT 16TH
FLOOR DATA CENTER

PROJECT : SUPPLY, DELIVERY, INSTALLATION AND CONFIGURATION OF
PRECISION AIR CONDITIONING UNIT (PACU) WITH THREE
YEARS WARRANTY AND SUPPORT FOR HEADOFFICE

SUBJECT : Bill of Quantities Form

Description of Cost	Quantity	Unit Cost	Total Cost
Precision Air Conditioning Unit Cooling at LANDBANK Head office	1 unit	PhP _____	PhP _____
30 Tonner Precision Air Conditioning Unit Cooling			
<i>Inclusive of the following:</i>			
▪ Outdoor Condenser	2 units	_____	_____
▪ Copper Piping	1 Lot	_____	_____
▪ Electrical peripherals	1 Lot	_____	_____
▪ Electrical feeder-line			
▪ Electrical system indicated in Annexes A & B			
▪ Electrical conduit			
▪ Electrical cables and conduit			
▪ Booster Fans	4 units	_____	_____
▪ Water Leak Detector	1 Lot	_____	_____
<i>Services:</i>			
▪ Installation Cost	1 Lot	_____	_____
▪ Dismantling and Hauling-out of old PACU at LANDBANK Antipolo Warehouse	1 Lot	_____	_____
▪ Three (3) Years 24/7 Local and Remote Technical and Help Desk Support Services	1 Lot	_____	_____
▪ Three (3) Years Onsite Support Services	1 Lot	_____	_____
▪ Skill Transfer minimum of one (1) training day for 10 DCMD personnel and 5 FMD personnel	1 Lot	_____	_____
Total Cost inclusive of VAT:			PhP _____

Note: The Supplier shall fill in rates and prices for all items of the Bill of Quantities. Quotations not addressing or providing all of the required items in the Bill of Quantities shall be considered non- responsive and, thus, automatically disqualified. In this regard, where a required item is provided, but no price is indicated, the same shall be considered as non- responsive, but specifying a "0" (zero) for the said item would mean that it is being offered for free.

Submitted by:

Name of Bidder

Printed Name of Authorized Representative with Signature

Date