



LAND BANK OF THE PHILIPPINES

ISO 14001 CERTIFIED

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**BID BULLETIN NO. 1
For ITB No. 2015-3-113**

PROJECT : One Lot Supply, Delivery, Installation, Testing and Commissioning of 4.8 KW Photovoltaic / Solar Panel System On-Grid Type at LANDBANK Tuguegarao Capitol, Laoag, Angeles City, San Fernando (La Union) and Tarlac Branches

IMPLEMENTOR : Procurement Department

DATE : June 11, 2015

This Bid Bulletin is issued to modify or amend items in the Bid Documents. This shall form an integral part of the Bid Documents.

The modifications or amendments are as follows:

- 1) One of the technical specifications of the 4.8 KW Photovoltaic / Solar Panel System specifically on the On-Grid Diverter - Rated Power (KW) has been revised, to wit:

From	To
1.0 KW	5.0 KW

- 2) The delivery period has been revised, to wit:

From	To
Forty five (45) calendar days after receipt of Notice to Proceed	Sixty (60) calendar days after receipt of Notice to Proceed

- 3) Terms of Reference has been revised. Please see attached revised Annexes A1 to A5.
- 4) The use of mono-crystalline type of panel will remain as indicated in the specifications.
- 5) Optimum Operating Voltage per panel will remain at 17.8 V.
- 6) Section VI (Schedule of Requirements), Section VII (Technical Specifications) and Checklist of Bidding Documents have been revised. Please see attached revised pages 69, 71, 72 and 89.

For guidance and information of all concerned.


ALWIN I. REYES
Department Manager
Procurement Department

TERMS OF REFERENCE

I. Name and Description of the Project:

One (1) Lot – Supply of labor, materials, tools, equipment and technical expertise, testing and commissioning for the installation of 4.8 KW PhotoVoltaic/Solar Panel On-grid Type for the following LBP Branches:

1. LBP Tuguegarao Capitol Branch
2. LBP Laoag Branch
3. LBP San Fernando (LU) Branch
4. LBP Tarlac Branch
5. LBP Angeles Branch

II. Objective of the Project:

1. To support the Government's program on renewable energy and Bank's advocacy/Corporate Social Responsibility consistent with LBB's direction for a green building.
2. To comply with the requirements of the Bank's Environmental Management Program on ISO14001 certification, cost reduction program and other regulatory laws and requirements of the Philippines.

III. Scope of the Project and Delivery Time/Completion:

1. Supply, delivery and installation	<ul style="list-style-type: none"> • Mobilization of manpower and equipment/tools at the site • PhotoVoltaic/Solar Panel System <ol style="list-style-type: none"> 1. Solar Module 2. Inverter 3. Mounting Frames 4. Wires/Cables 5. Miscellaneous Materials • Testing, commissioning and energization • Cleaning-up works and demobilization
2. Installation Schedule	Monday to Sunday
3. Delivery Period	Sixty (60) calendar days upon receipt of Notice to Proceed (NTP)
4. Warranty	Ten (10) years for Solar Module, Inverter and Mounting frame including against factory defects and faulty workmanship reckoned from formal turn-over and final acceptance
5. Training	Conduct orientation to LBP Branch Staff and PMED representatives
6. Maintenance	Conduct Preventive Maintenance service during warranty period

7. Submit Reports to PMED/Branch		
Name of Report	Description	Due Date of Submission
a. Detailed drawing plans	Submission of complete electrical/ detailed drawing and spot section plans	Prior to installation/ implementation
b. Service Reports	Actual activities conducted by the supplier	Upon Completion
c. Test Results and Reports	Data obtained from actual testing	Upon Completion
d. Warranty Certificate	Submission of Warranty Certificate	Upon Completion
e. Brochures	Operation and Preventive Maintenance Manual	Upon Completion

IV. Technical and Other Specifications:

Name and Description	Technical Specifications	
Solar Panel Module	<u>Mechanical</u>	
	Cell Type	Mono-crystalline silicon
	Peak Power Output (Pmax)	100W,250W,300 W
	Dimension(mm)	1200x540x35 min
	Weight(kg)	9.6
	Back Sheet Colour	White
	Mechanical Load (MPa)	2400
	Certification	ISO9001
	<u>Electrical</u>	
	Open-Circuit Voltage (Voc)	22.3
	Optimum Operating Voltage (Vmp)	17.8
	Short-Circuit Current (Isc)	5.53
	Optimum Operating Current (Imp)	5.62
	Cell Efficiency (%)	≥ 18
	Max system Voltage	750 V
Max Fuse Rating (A)	10	
Power Tolerance (%)	± 13	
<u>Temperature</u>		
Nominal Operating Cell Temp.	47°C(+2°C)	
Temperature Coefficient of Pmax	-0.45%/°C	
Temperature Coefficient of Voc	-0.35%/°C	
Temperature Coefficient of Isc	+0.05%/°C	
ON-GRID DIVERTER	Type	Isolating Transformer
	Rated Power (KW)	5Kw
	Max. PV Module Power Allowed	1.1

	Max. Open Voltage Recommended PV Module Numbers MPPT range (VDC) Grid Voltage Range (VAC) Rated Grid Frequency Max. Efficiency Display THD(lac) Power Factor Waterproof and Dustproof Cooling System Operating Environment Temperature Operating Environment Humidity Dimension (mm) Weight (kg) Certification	100 4 loops (17V/module) 40 ~ 8 180 ~ 260 60 hz. 94% LED THD(lac)<4%(full cap.) 99% Outdoor Naturally Cooling -20°C ~ +50°C 0 ~ 95% (Non-condensing) 380x410x240 33 ISO9001
PHOTOVOLTAIC WIRE	Conductors Insulation Rated Temperature Rated Voltage Protection Application Reference Standard Certification	Stranded Copper XLPE 90°C for exposed or concealed wiring 600V Sunlight resistance Direct Burial UL Subject 4703 ISO9001
Mounting Frame	Type Material Design Load	Roof Mount Extruded Aluminum (Frame & Rails), Anodized Treatment 105 kN/sq.m

V. Qualification and Documentary Requirements:

Qualification Requirement	Documentary Requirement
1. Must have minimum experience of five (5) years in the business of sales, design, installation and commissioning of Photovoltaic/ Solar Panel System	1. Submission of related documents (e.g.previous Purchase Orders, Contracts, etc.)

VI. Manner of Payment:

Deliverables	Percentage of Payment	Amount of Payment
• Upon 100% completion and acceptance of the project	90%	
• Retention fee: After the warranty period	10%	
TOTAL	100%	

VII. Other Terms and Conditions:

- A. The prospective supplier should submit projected computation/calculation of the **expected savings and payback period** of the Solar System Panel being supplied during the bidding.
- B. The supplier should include options for **Central Control Monitoring System (Web Access)** for easy management of all branches having Solar System Panel.
- C. The prospective supplier should inspect, verify and assess condition, location and details of the **project site and design a system that will generate the maximum power that solar panels can harness on the rooftop of the particular Landbank buildings** and submit a Comprehensive Inspection Report. PMED will issue the corresponding Certificate of Inspection (CI). No CI will mean outright disqualification of bid.
- D. The prospective supplier should submit the detailed schedule of the project using Gantt Chart and work methodology as part of the bid document (technical) to be submitted in a separate envelope.
- E. In line with the Bank's Environmental Management System (EMS) program and being an ISO 14001 certified institution, the winning supplier is required to use the appropriate equipment, hand tools and personal protective gears and equipment during the implementation of the project.
- F. The winning supplier should coordinate with PMED all works to be undertaken relative to the project.
 - 1. Mounting frames must be properly mounted on roof framing such as C-purlins, rafter, etc.
 - 2. Winning supplier must apply sealants on roof holes including existing roof holes present in the area where the solar panels will be installed.
 - 3. In the event that the solar panels will be installed on roof deck, the contractor shall apply structural sealant to all anchoring stone made on the concrete slab and re-apply waterproofing.
 - 4. All areas applied with waterproofing should be flood-tested for at least 24 hours in coordination with the branch/end-user.
- G. The winning supplier should be responsible for the collection of all wastes, residues, empty containers, rugs, etc, etc resulting from the source emission sampling activities. The collected wastes/residues shall be placed and sealed in plastic bags or containers,

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- labelled property and shall be brought back to the supplier's warehouse for proper disposal.
- H. The winning supplier should be liable for any harm, damage or injury that may be sustained or suffered by its own crew/workers while in the performance of their duty/job under this project.
- I. The winning supplier should be held directly responsible for any injury to person and/or damage to the Bank's property arising from the acts whether partial, contributory, or due entirely to the fault, negligence and/or dishonesty of the supplier's personnel in the course of their duties.
- J. The winning supplier should maintain cleanliness at all times. It shall clean the affected area immediately after each workday.
- K. The winning supplier should secure a Comprehensive General Liability Insurance (CGLI) to be submitted to LBP prior to the start of the project of issuance of Notice to Proceed (NTP).

CGLI coverage shall be the following:	
> Each person	PhP 50,000
> Each accident	PhP 50,000
> Each period of indemnity	PhP 50,000
Property damage liability	
> Each person	PhP 50,000
> Each accident	PhP 50,000
> Each period of indemnity	PhP 50,000
Maximum aggregate limit	
> Contract amount under this project per bid offered by the winning supplier.	

- L. The supplier should strictly observe the Bank's existing rules and regulations and shall be subject to the Bank's standard security policies and procedures while in the premises.
- M. The supplier should submit shading and load analysis prior to the installation of PhotoVoltaic/Solar Panel On-grid Type.

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Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project sites.

Item No.	Item Description	Quantity	Delivery Period and Destination
	One Lot Supply, Delivery, Installation, Testing and Commissioning of 4.8 KW Photovoltaic / Solar Panel System On-Grid Type at following LANDBANK Branches:		Sixty (60) calendar days per Branch after receipt of Notice to Proceed
1	Tuguegarao Capitol Branch	1 set	Regional Gov't Center, Barig Sur, Tuguegarao City, Cagayan
2	Laoag Branch	1 set	LANDBANK Bldg., J.P. Rizal St., Brgy. San Miguel, Laoag City, Ilocos Norte
3	Angeles City Branch	1 set	LANDBANK Bldg., Sto. Entiero corner Miranda Sts., Brgy. Sto Rosario, Angeles City, Pampanga
4	San Fernando (La Union) Branch	1 set	LANDBANK Bldg., Quezon Avenue, San Fernando City, La Union
5	Tarlac Branch	1 set	Philamlife Bldg., F. Tanedo St., Tarlac City, Tarlac

Conforme:

Name of Bidder

Signature Over Printed Name of
Authorized Representative

Position

Technical Specifications

Item No.	Specification	Statement of Compliance
		<p>Bidders must state below either "Comply" or "Not Comply" against each of the individual parameters of each specification stating the corresponding performance parameter of the items 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 provisions of ITB Clause 3.1(a)(ii) and/or GCC Clause 2.1(a)(ii)</p>
1 2 3 4 5	<p>One Lot Supply, Delivery, Installation, Testing and Commissioning of 4.8 KW Photovoltaic / Solar Panel System On-Grid Type at following LANDBANK Branches:</p> <p>Tuguegarao Capitol Branch Laoag Branch Angeles City Branch San Fernando (La Union) Branch Tarlac Branch</p>	<p>Please state here either "Comply" or "Not Comply"</p>

	<p>Other requirements :</p> <ol style="list-style-type: none"> 1. Compliance to the scope of works and specifications stated in the Terms of Reference (TOR) – Revised Annexes A1 - A5. 2. Submission of the following documents inside the eligibility/technical envelope: <ol style="list-style-type: none"> a) Brochures or any other document indicating the complete specifications of the offered photovoltaic/solar panel system b) Previous purchase orders or any other document to show that bidder has a minimum experience of five (5) years in the sales, design, installation and commissioning of photovoltaic/solar panel system c) Projected computation / calculation of the expected savings and payback period of the proposed solar panel system d) Certificate of Inspection issued by Project Management and Engineering Department e) Detailed schedule of the project using Gantt Chart and work methodology 3. The winning bidder must affix a sticker/tag/label with company name and after-sales-service contact number or equivalent form of marking on the photovoltaic/solar panel system 	<p>Please state here either “Comply” or “Not Comply”</p>
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Conforme:

Name of Bidder

Signature Over Printed Name of
Authorized Representative

Position

Documents. The statement shall include all information required in the PBDs prescribed by the GPPB. (sample form - Form No. 4).

- 3.f 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.
- 3.g The prospective bidder's computation for its Net Financial Contracting Capacity (sample form - Form No. 5).
- 3.h Brochures or any other document indicating the complete specifications of photovoltaic/solar panel system being offered.
- 3.i Previous purchase orders/contracts or any other document to show that bidder has minimum experience of five (5) years in the sales, design, installation and commissioning of photovoltaic/solar panel system.
- 3.j Projected computation/calculation of the expected savings and payback period of the proposed solar panel system.
- 3.k Certificate of inspection issued by Project Management and Engineering Department.
- 3.l Detailed schedule of the project using Gantt Chart and work methodology.
- 3.m 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 the legal eligibility documents. The submission of technical and financial eligibility documents by any of the joint venture partners constitutes compliance.
4. Bid security in the prescribed form, amount and validity period (ITB Clause 18.1 of the Bid Data Sheet);
5. **Revised Schedule VI - Schedule of Requirements with signature of bidder's authorized representative.**
6. **Revised Section VII - Technical Specifications with response on compliance and signature of bidder's authorized representative.**