



UNIVERSITY OF RUHUNA
WELLAMADAMA, MATARA

PROCUREMENT OF GOODS UNDER
NATIONAL SHOPPING PROCEDURES

INVITATION FOR QUOTATIONS
FOR PROCUREMENT OF

Supply, Delivering, Installation, Commissioning, Testing and Maintenance of
Microgrid – System related Equipment for Threelanka Project,
Faculty of Engineering,
University of Ruhuna,
Hapugala,
Galle.

RUH/ENG/F/C/Q/2023/07

04th October 2023

Assistant Bursar
Faculty of Engineering
University of Ruhuna
Hapugala
Galle

A handwritten signature in blue ink is written over the stamp.

Section I. Instructions to Vendors (ITV)

A: General	
1. Scope of Bid	1.1 The Purchaser named in the Data Sheet invites you to submit a quotation for the supply of Goods as specified in Section III Schedule of Requirements.
B: Contents of Documents	
2. Contents of Documents	<p>2.1 The documents consist of the Sections indicated below.</p> <ul style="list-style-type: none"> • Section I. Instructions to Vendors (ITV) • Section II. Data Sheet • Section III. Schedule of Requirements • Section IV. Technical Specifications & Compliance with Specifications • Section V. Quotation submission Form(s)
C: Preparation of Quotation	
3. Documents Comprising your Quotation	<p>3.1 The Quotation shall comprise the following:</p> <ul style="list-style-type: none"> (a) Quotation Submission Form and the Price Schedules; (b) Technical Specifications & Compliance with Specifications
4. Quotation Submission Form and Price Schedules	<p>4.1 The vendor shall submit the Quotation Submission Form using the form furnished in Section V. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.</p> <p>4.2 Alternative offers shall not be considered. The vendors are advised not to quote different options for the same item but furnish the most competitive among the options available to the bidder. Options shall not be considered.</p>
5. Prices and Discounts	<p>5.1 Unless specifically stated in Data Sheet, all items must be priced separately in the Price Schedules.</p> <p>5.2 The price to be quoted in the Quotation Submission Form shall be the total price of the Quotation, including any discounts offered.</p> <p>5.3 The applicable VAT shall be indicated separately and NBT Shall not be paid by the University .</p> <p>5.4 Prices quoted by the vendor shall be fixed during the vendor's performance of the Contract and not subject to variation on any account. A Quotation submitted with an adjustable price shall be treated as non-responsive and may be rejected.</p>

6. Currency	6.1 The vendors shall quote only in Sri Lanka Rupees.
7. Documents to Establish the Conformity of the Goods	<p>7.1 The vendor shall furnish as part of its quotation the documentary evidence that the Goods conform to the technical specifications and standards specified in Section IV, “Technical Specifications & Compliance with Specifications”.</p> <p>7.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods, demonstrating substantial responsiveness of the Goods to the technical specifications, and if applicable, a statement of deviations and exceptions to the provisions of the Technical Specifications given.</p> <p>7.3 If stated in the Data Sheet the vendor shall submit a certificate from the manufacturer to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in Sri Lanka.</p>
8. Period of Validity of quotation	8.1 Quotations shall remain valid for the period of sixty (60) days after the quotation submission deadline date.
9. Format and Signing of Quotation	9.1 The quotation shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the vendor.
10. Site visit	
D: Submission and Opening of Quotation	
11. Submission of Quotation	<p>11.1 Vendors may submit their quotations by mail or by hand in sealed envelopes addressed to the Purchaser and bear the specific identification of the quotation number.</p> <p>11.2 If the quotation is not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the quotation.</p>
12. Deadline for Submission of Quotation	12.1 Quotation must be received by the Purchaser at the address set out in Section II, “Data Sheet”, and not later than the date and time as specified in the Data Sheet.
13. Late Quotations	13.1 The Purchaser shall reject any quotation that arrives after the deadline for submission of quotations, in accordance with ITV Clause 11.1 above.
14. Opening of Quotations	<p>14.1 The Purchaser shall conduct the opening of quotation in public at the address, date and time specified in the Data Sheet.</p> <p>14.2 A representative of the bidders may be present and mark his attendance.</p>

E: Evaluation and Comparison of Quotations	
15. Clarifications	<p>15.1 To assist in the examination, evaluation and comparison of the quotations, the Purchaser may, at its discretion, ask any vendor for a clarification of his quotation. Any clarification submitted by a vendor in respect to his quotation which is not in response to a request by the Purchaser shall not be considered.</p> <p>15.2 The Purchaser's request for clarification and the response shall be in writing.</p>
16. Responsiveness of Quotations	<p>16.1 The Purchaser will determine the responsiveness of the quotation to the documents based on the contents of the quotation received.</p> <p>16.2 If a quotation is evaluated as not substantially responsive to the documents issued, it may be rejected by the Purchaser.</p>
17. Evaluation of quotations	<p>17.1 The Purchaser shall evaluate each quotation that has been determined, to be substantially responsive.</p> <p>17.2 To evaluate a quotation, the Purchaser may consider the following:</p> <ul style="list-style-type: none"> (a) the Price as quoted; (b) price adjustment for correction of arithmetical errors; (c) price adjustment due to discounts offered. <p>17.3 The Purchaser's evaluation of a quotation may require the Consideration of other factors, in addition to the Price quoted if stated in Section II, Data Sheet. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods. .</p>
18. Purchaser's Right to Accept any Quotation, and to Reject any or all Quotations	<p>18.1 The Purchaser reserves the right to accept or reject any quotation, and to annul the process and reject all quotations at any time prior to acceptance, without thereby incurring any liability to bidders.</p>

F: Award of Contract

19. Acceptance of the Quotation	19.1 The Purchaser will accept the quotation of the vendor whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the documents issued.
20. Notification of acceptance	20.1 Prior to the expiration of the period of validity of quotation, the Purchaser will notify the successful vendor, in writing, that his quotation has been accepted.
21. Performance security	21.1 Amount of performance security required is 10% of the Initial Contract Price and form acceptable is unconditional guarantee or bond given in the Standard Form of Performance Security valid for a period of 28 days beyond the warrantee period from the date of award of contract.
22. Payment	22.1 Payment shall be made within one month after receiving the invoice for system supplied, installed, commissioned, tested and certified
23. Liquidated Damages	23.1 The supplier should deliver the items within the delivery period stipulated in the schedule of requirements. The supplier should make payment to the purchaser for each week of delay in delivery, at the rate of 0.5% of the contract sum per each week of delay, up to a maximum of 10% of the contract sum.

Section II: Data Sheet

ITV Clause Reference	
1.1	The Purchaser is : Vice Chancellor, University of Ruhuna Address: University of Ruhuna, Wellamadama, Matara
5.1	If the bidder is allowed to quote for lesser number of items than the total number of items specified, indicate the details: Bidders are allowed to quote for any item or all the items
7.3	Manufacturer's Authorization is required.
11.1	Address for submission of Quotations is " RUH/ENG/F/C/Q/2023/07 " marked on the top left-hand corner of the envelope and addressed to Assistant Bursar, Faculty of Engineering, University of Ruhuna, Hapugala, Galle. Deadline for submission of quotations is on or before 10.00 a.m. on 18th October 2023
13	The quotations shall be opened at the following address: AB Office, Faculty of Engineering, University of Ruhuna, Hapugala, Galle.
16	Other factors that will be considered for evaluation are (List and describe the Methodology): Should satisfy the given requirements

Section III: Schedule of Requirements

Note: 1. Bidders may be quoted for any item or all items
Evaluation will be done separately for each item based on the price of individual item
All items should be delivered within 4 weeks after placing the order. No time extension will be considered.
NBT shall not be paid by the university

Item No.	Brief Description of the Goods	Specifications	Quantity	Delivery Period in Days from issue of Purchase Order	Place of Delivery & installation	Installation and warranty Requirements if any
1.	Microgrid – System related Equipment	Please refer Section IV	1	4 weeks	Faculty of Engineering, Hapugala, Galle	Please Specify

Section IV: Technical Specification & Compliance

Supply, Delivering, Installation, Commissioning, Testing and Maintenance of Microgrid – System related Equipment for the Threelanka Project, Faculty of Engineering, University of Ruhuna, Hapugala, Galle.

1. Microgrid-system related equipment

Qty – 01 No.

Feature	Required Specification	Bidders Compliance		If not, Bidder's offer
		Yes	No	
Inverter/Charger				
Make	(Specify)			
Model	(Specify)			
Country of Origin	(Specify)			
Country of Manufacture	(Specify)			
Instrument type	Inverter + Charger			
Required quantity	1			
Compatibility	Must be fully compatible with other equipment in the specification and must be able to form a microgrid with the aid of other equipment quoted in the same bid.			
Continuous apparent Output Power	3kVA or higher @ 25 °C			
Continuous active Output Power	2kW or higher @ 25 °C			
Maximum apparent input power	3kVA or higher @ 25 °C			
Output voltage	230V AC ±3% or tighter tolerance 50Hz ±0.2% or tighter tolerance			
Specified Maximum Efficiency	93% or higher			
AC input range	190V to 250V or wider 48Hz to 62Hz or wider			
Maximum battery charging current	Larger than 30A			
Remote monitoring	Must be available for Free			
Parallel and Three phase operation	Required			
Remote on-off	required			
Nominal Battery voltage	48V			
DC Input voltage range	40V-65V or wider			
Interfaces	BMS-CAN, USB, Ethernet, and Wi-Fi (All interfaces are required)			
Standards	EN-IEC 60335-1, EN-IEC 60335-2-29, and IEC 62040-1 required			
Warranty	5 years comprehensive, on-site.			

Grid Tied inverter				
Make	(Specify)			
Model	(Specify)			
Country of Origin	(Specify)			
Country of Manufacture	(Specify)			
Instrument type	Grid-tied inverter.			
Required quantity	1			
Compatibility	Must be fully compatible with other equipment in the specification and must be able to form a microgrid with the aid of other equipment quoted in the same bid.			
Maximum Input DC voltage	600V or higher			
Rated DC input voltage	Approximately 300V			
Rated Input DC power	2300W or higher			
Number of MPPT channels	1 or more			
Maximum DC input current	10A or higher			
Startup DC voltage	150V or lower			
Input over-voltage protection	Available			
Input over-current protection	Available			
Number of Output phases	1			
Rated output power	2000W or more			
Rated Grid voltage	230V			
Grid voltage range	190V to 260V or wider range			
Current Harmonic distortion	< 3.5% or better			
Maximum O/P AC current	10A or more			
Rated O/P frequency range	48~52Hz or wider			
Power factor range	± (0.1 to 1)			
Monitoring	Wireless monitoring via free software interface online.			
Ambient temperature range	0 to 60 °C or a wider range			

Relative humidity	0-100% condensing.			
Ingress protection	IP65 or better			
Cooling	Natural cooling (No fans allowed)			
Standards required	IEC/EN 62109-1, IEC/EN 62109-2, AS/NZS 4777.2, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-3-3			
Warranty	10 years comprehensive, on-site.			
Solar panels				
Make	(Specify)			
Model	(Specify)			
Country of Origin	(Specify)			
Country of Manufacture	(Specify)			
Instrument type	Solar panel			
Required quantity	4			
Compatibility	Must be fully compatible with other equipment in the specification and must be able to form a microgrid with the aid of other equipment quoted in the same bid.			
Cell type	P-type monocrystalline			
Number of Cells	144			
Weight	Less than 30kg per panel			
Rated power	540W or more			
Front glass thickness	3mm or more thickness Tempered glass			
Coating	Anti-reflective coating on front glass			
Operating temperature	-10°C~+80°C or wider range			
Power Tolerance	+2% or better			
Nominal operating cell temperature range	43 to 47 °C			
Temperature coefficient of open circuit voltage	-0.3%/°C			
Multi-bar-based	Available			
Standards	IEC61215(2016), IEC61730(2016)			
Warranty	12 Years, Comprehensive, on Site.			
Battery				
Make	(Specify)			

Model	(Specify)			
Country of Origin	(Specify)			
Country of Manufacture	(Specify)			
Instrument type	Battery			
Required quantity	1			
Compatibility	Must be fully compatible with other equipment in the specification and must be able to form a microgrid with the aid of other equipment quoted in the same bid.			
Nominal voltage	51.2V			
Type	LiFePo4 (LFP)			
Rated capacity	100Ah			
Maximum Charging Current rating	1C			
Maximum Continuous Discharging Current rating	1C			
BMS Display	LCD			
Communication Protocols	CANBUS/ MODBUS			
Parallel connection support	Available			
Design Life	More than 15 Years			
Cycle Life	More than 3000 Cycles @ 100% DOD			
Ingress protection	IP31 or better			
Operating Temperature Range	-0°C~+55°C or wider range			
BMS communication with Inverter	Available and compatible with Inverter/Charger.			
Warranty	5 Years, Comprehensive, on-site			
Other items for installation - Battery Wire				
Wire size	35mm ² for battery,			
Quantity	Red 2m and Black 2m			
Lugs	35-8 size lugs, 20pcs			
Lugs	25-8 size lugs, 20pcs			
Other items - Solar wires 1				
Wire size	6mm ² for solar panel			
Quantity	Red 100m and Black 100m			

Other items - Solar wires 2				
Wire size	4mm ² for solar panel			
Quantity	Red 100m and Black 100m			
Other items - Connectors				
MC4 Solar connectors	Male + Female pair, 30 pairs			
Installation	Installation on site is required			
Other installation materials and accessories	Specify			

Section V

Quotation Submission Form

[The Vendor shall fill in this Form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions will be accepted.]

Date:.....

To: The Vice- Chancellor,
University of Ruhuna,
Wellamadama,
Matara.

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the document issued;
- (b) We offer to supply in conformity with the documents issued and in accordance with the Delivery Schedules specified in the Schedule of Requirements, the following Goods – Supply, Delivery, Installation, Testing, Commissioning and Maintenance of Microgrid – System related Equipment for the Threelanka Project, Faculty of Engineering, University of Ruhuna, Hapugala, Galle.
- (c) The total price of our quotation including any discounts offered is: [insert the total quoted price in words and in figures];.....
.....
(Excluding VAT)
- (d) Our quotation shall be valid for the period of time specified in ITV Sub-Clause 8.1, from the date fixed for the quotation submission deadline in accordance with ITV Sub-Clause 11.1, and it shall remain bindingg upon us and may be accepted at any time before the expiration of that period;
- (e) We understand that this quotation, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us.
- (f) We understand that you are not bound to accept the lowest evaluated quotation or any other quotation that you may receive.

Signed:.....
[insert signature of person whose name and capacity are shown]

Name:.....
[insert complete name of person signing the Bid Submission Form]

Company Seal.....

Dated:.....

PRICE SCHEDULE

Item. No.	Description	Qty.	Unit Rate. (Rs. & Cts) Without VAT	Total Amount (Rs. & Cts.) Without VAT	VAT (Rs. & Cts)	Total Amount (Rs. & Cts.) With VAT
1.	Microgrid – System related Equipment	1				
Total						

Total amount for the separate items excluding VAT (Column 1) in words:

Item 01.

Note: In case of discrepancy between unit price and total, the unit price shall prevail.

We agree to supply and maintenance the above goods in accordance with the technical specifications for a total contract price of Rupees
..... (amount in figures)

[..... (amount in words)] **(for Item No. 01)**
within the period specified in the Invitation for Quotations.

We also confirm that the warranty/guarantee specified shall apply to the offered goods.

.....

Signature of the Bidder

.....

Name of the Bidder and official seal

.....

Date

Telephone No:

Mobile No (if available) :.....

Fax:

Manufacturer's Authorization

[If requested under ITV clause 7.3, the Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated.]

Date:

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a quotation the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and supply the goods.

We hereby extend our full guarantee and warranty with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on _____ day of _____, _____ [insert date of signing]

Contract Agreement

THIS CONTRACT AGREEMENT is made

the [insert: number] day of [insert: month], [insert: year].

BETWEEN

(1) [insert complete name of Purchaser], a [insert description of type of legal entity, for example, an agency of the Ministry of or corporation and having its principal place of business at [insert address of Purchaser] (hereinafter called “the Purchaser”), and

(2) [insert name of Supplier], a corporation incorporated under the laws of [insert: country of Supplier] and having its principal place of business at [insert: address of Supplier] (hereinafter called “the Supplier”).

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., [insert brief description of Goods and Services] and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of [insert Contract Price in words and figures, expressed in the Contract currency (ies)] (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:

(a) This Contract Agreement

(b) Contract Data

(c) Conditions of Contract

(d) Technical Requirements (including Schedule of Requirements and Technical Specifications)

(e) The Supplier’s Bid and original Price Schedules

(f) The Purchaser’s Notification of Award

(g) [Add here any other document(s)]

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

4. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Democratic Socialist Republic of Sri Lanka on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: [insert signature]

in the capacity of [insert title or other appropriate designation]

in the presence of [insert identification of official witness]

For and on behalf of the Supplier

Signed: [insert signature of authorized representative(s) of the Supplier]

in the capacity of [insert title or other appropriate designation]

in the presence of [insert identification of official witness]