



Meghalaya Basin Management Agency

C/o Meghalaya State Housing Financing Cooperative Society,
Upper Nongrim Hills, Behind Bethany Hospital, Shillong, East Khasi Hills
District, Meghalaya – 793003(CIN No. U75144ML2012NPL008509)
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**RFE (REQUEST FOR EMPANELMENT) of Agencies for
Installation, Commissioning & Comprehensive Maintenance
of Small (30 KW, 50 KW), Medium (100KW, 200KW) & Large
(500KW & 1000 KW) scale categories of Multi Source charged
Off Grid Solar Inverter System**

Tender Ref. No: **MBMA/173/EOVFSES/Part A/2025 - 26**
Date of issue of Tender document: **20th December 2025**

Meghalaya Basin Management Agency
Government of Meghalaya
Meghalaya State Housing Financing & Cooperative Society,
Upper Nongrim Hills,
Meghalaya, Shillong – 793003

NOTE:

1. MBMA has the right to award the work under this tender to single or multiple vendors and in multiple tranches based on the lowest quote ascertained through this tender.
2. The implementation of Solar Solutions at the said locations is subject to receiving the approval for installation from the local authorities.
3. Though adequate care has been taken while preparing the Notice Inviting Tender (NIT) document, the Bidders shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within seven (7) days from the date of notification of Tender/Request for Empanelment (RFE)/ Issue of the RFE documents, it shall be considered that the RfS document is complete in all respects and has been received by the Bidder.
4. MBMA reserves the right to cancel/ withdraw this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision
5. MBMA reserves the right to modify, amend or supplement this document.
6. While this RFE has been prepared in good faith, neither MBMA nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFE, even if any loss or damage is caused by any act or omission on their part.

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1. Background

With most of the population of Meghalaya living in rural areas, agriculture remains the main source of income and livelihood. Consequently, the importance of strengthening the agricultural sector is high. To support the farmers, collectivisation has been aggressively taken up in order to overcome the challenges of scattered landholdings and achieve economies of scale. The State currently has over 400 vibrant cooperatives with strong farmer memberships.

To take the production dynamics to the next level, a hub and spoke model has been set in place. Over 197 collection centres, 68 warehouses, 44 cold storage units and 160 micro-processing units, operationalised through a community driven model, will act as spokes. The spokes will cater to the PRIME hubs which are being established at strategic locations across the State as centres for strengthening home-grown agri enterprises. These hubs will address the higher-level needs of farmers and agri entrepreneurs through support for funding, technology, and access to remunerative markets.

To power these larger units at the hubs, a sustainable solution must be in place to avoid the overburdened grid of the state. Further there are many institutions in rural areas requiring solar solutions with requirements ranging from 30KW to 100KW. On-grid solutions and hybrid solutions have been ruled out to reduce dependency on the grid, by avoiding installation of heavy duty transformers and diesel generators. Thus, **off grid solar solutions** have been shortlisted to power these PRIME HUBs which have a requirement ranging from 30KW to 1MW. It shall be noted that these off grid solutions will have **battery systems that can be charged via multiple sources of power** such as **solar, grid and diesel generators** in the absence of above mentioned. Since these are capital heavy investments, **warranty of 10 years of battery and inverter/intelligent energy management systems** and 25 years for panels are required through an Annual Maintenance Charge model. It is a crucial requirement of the solar power system to support all the machinery load on the battery system rather than on the grid or diesel generator.

The system shall be designed to operate continuously for 24 hours a day without interruption. At any point in time, the load supported by the system shall not exceed 80% of the installed panel capacity. To ensure uninterrupted operation, grid power and/or diesel generator (DG) support shall be provided as auxiliary power, sized at approximately

30% of the installed panel capacity. For example, a 30 kW system shall be capable of supporting a maximum continuous load of 24 kW over a 24-hour period, with the remaining power requirement supported through grid supply and/or a DG of approximately 8–9 kW capacity.

2. Data Sheet

Tender No.	MBMA/173/EOVFSES/Part A/2025 - 26
Name of the tender issuer	Meghalaya Basin Management Agency (MBMA)
Purpose of the tender	Installation, Commissioning & Comprehensive Maintenance of Small (30 KW, 50 KW), Medium (100KW, 200KW) & Large (500KW & 1000 KW) scale categories of Multi Source charged Off Grid Solar Inverter System The detailed specifications of the mentioned component are specified in Annexure I
Quantity to be supplied	The empaneled agencies will qualify for tenders for solar panel installment in the state.
Earnest Money Deposit (EMD)	Rs. 10 lakhs in form of a DD drawn in favour of Chief Executive Officer, Meghalaya Basin Management Agency Shillong
Date of issue of tender document	20 th December 2025
Pre-Bid clarification	The Pre-Bid queries can be emailed to us latest by 10 th January 2026 until 5 PM. Email id for sending the pre-bid queries- humanresources@themeghalayanage.com
Last Date & Time for Submission of Bids	20 th January 2026 by 5:00 PM at the MBMA office and the softcopy of the technical bids to be emailed to humanresources@themeghalayanage.com
Date & Time of Price Bid Opening	Will be intimated later to the successful bidder who qualify the technical bid criteria
Address for Communication	Meghalaya Basin Management Agency, C/O Meghalaya State Housing Financing Cooperative Society, Upper Nongrim Hills, Behind Bethany Hospital, Shillong, Meghalaya – 793003

3. Eligibility Criteria for Empanelment of Agencies

The empanelment will remain in force for a period of two years i.e., from February 2026 to February 2028 subject to annual review every year. **If the services and/or products provided by the agency/ies are found to be unsatisfactory or at any time it is found that the information provided for empanelment or for any quotation is false, MBDA reserves the right to remove such agency/ies from the empanelled list.** The Agency should qualify the following necessary eligibility criteria and possess the required experience, resources, and capabilities in providing services and materials necessary to meet the requirements indicated in the tender document. Agencies not meeting the necessary eligibility criteria will not be considered for further evaluation. **Further the tender Committee reserves the right to undertake site visits to verify the supporting documents submitted to prove the minimum eligibility and technical eligibility criteria.**

There will be 3 different categories under which agencies can apply – Small (30kw & 50kw), Medium (100kw & 200kw) and Large (500kw & 1,000kW). Each of these categories will have separate minimum eligibility criteria and technical evaluation criteria. It shall be noted that if an agency satisfies for a category, the agency will automatically qualify for smaller categories. E.g.: An agency shortlisted for Medium scale category will be shortlisted automatically for Small Scale Category, and an agency shortlisted for the Large scale category will qualify for the Medium and Small Category. An agency can apply for 1 or more categories. The criteria are as follows:

3.1 Minimum Eligibility Criteria

3.1.1 Small Scale Category (30KW & 50KW)

S. No	Criteria	Required Documentation
1	<p>A Bidder may be a single entity or any combination of them with a formal intent to enter into an agreement or under an existing agreement to form a Consortium. Maximum 2 (two) member of entities are allowed in a Consortium/ Joint Venture.</p> <p>In case of Consortium, both the member firms shall be a registered company OR firm in India registered under the relevant provisions/ Acts in India for the last three years as on the date of the issue of this RFP. In case of a joint venture the cumulative turnover of both the parties should satisfy the turnover criteria. Each party should at least account for 25% of the total turnover value.</p>	<p>Company incorporation certificate, Proprietorship Certificate, ROC registration, MoA of Company, AoA of Company, PAN, GST registration, etc. relating to business entity should be furnished</p>
2	<p>The agency should have undertaken, completed and maintained for the past two years at least 2 (two) projects of similar nature* for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities. The contract value for each of the project should be at least INR 20 Lakhs. In case of joint venture/ Consortium, combined project experience of all entities shall be considered for evaluation.</p>	<p>Work Order & completion and maintenance certificate from client (signed and sealed on client's letter pad)</p>
3	<p>Financial Capacity: The agency should have a cumulative turnover of at least INR 1 Crores (Rupees One Crore) in any of the 3 (three) consecutive financial years in last 5 years (FY 2024-25, FY 2023-24, FY 2022-2023, FY 2021-2022, FY 2020-2021)</p>	<p>Certificate from Statutory Auditor/ Registered Chartered Accountant</p>
4	<p>The Bidder / members of Consortium should not have been barred by the Central Government, any State Government, a statutory authority or a public sector undertaking, as the case may be, from participating in any project, and the bar subsists as on the date of the Proposal.</p>	<p>Self-Attested Undertaking/Declaration</p>

Only Eligible Bidders will be taken up for Technical and Financial Evaluation.

***Similar Projects:** Installation, Commissioning & Comprehensive Maintenance of at least 1(one) Multi Source charged Off Grid Solar Inverter System with minimum capacity of

30KW & 50KW each for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities and having contract value of at least 20 Lakhs per project.

3.1.2 Medium Scale Category (100KW & 200KW)

S. No	Criteria	Required Documentation
1	<p>A Bidder may be a single entity or any combination of them with a formal intent to enter into an agreement or under an existing agreement to form a Consortium. Maximum 2 (two) member of entities are allowed in a Consortium/ Joint Venture.</p> <p>In case of Consortium, both the member firms shall be a registered company OR firm in India registered under the relevant provisions/ Acts in India for the last three years as on the date of the issue of this RFP. In case of a joint venture the cumulative turnover of both the parties should satisfy the turnover criteria. Each party should at least account for 25% of the total turnover value.</p>	<p>Company incorporation certificate, Proprietorship Certificate, ROC registration, MoA of Company, AoA of Company, PAN, GST registration, etc. relating to business entity should be furnished</p>
2	<p>The agency should have undertaken, completed and maintained in the last 5 (five) years at least 2 (two) projects of similar nature* for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities. The contract value for each of the project should be at least INR 1 Crore. In case of joint venture/ Consortium, combined project experience of all entities shall be considered for evaluation.</p>	<p>Work Order & completion and maintenance certificate from client (signed and sealed on client's letter pad)</p>
3	<p>Financial Capacity: The agency should have a cumulative turnover of at least INR 4 Crores (Rupees Four Crores) in any of the 3 (three) consecutive financial years in last 5 years (FY 2024-25, FY 2023-24, FY 2022-2023, FY 2021-2022, FY 2020-2021,)</p>	<p>Certificate from Statutory Auditor/ Registered Chartered Accountant</p>
4	<p>The Bidder/ members of Consortium should not have been barred by the Central Government, any State Government, a statutory authority or a public sector undertaking, as the case may be, from participating in any project, and the bar subsists as on the date of the Proposal.</p>	<p>Self-Attested Undertaking/Declaration</p>

Only Eligible Bidders will be taken up for Technical and Financial Evaluation.

***Similar Projects:** Installation, Commissioning & Comprehensive Maintenance of at least 1(one) Multi Source charged Off Grid Solar Inverter System with minimum capacity of 100KW & 200KW each for municipal/state / central government, PSUs, any other government funded projects or any registered entities and having contract value of at least 1 Crore per project.

3.1.3 Large Scale Category (500KW & 1,000KW)

S.No	Criteria	Required Documentation
1	<p>A Bidder may be a single entity or any combination of them with a formal intent to enter into an agreement or under an existing agreement to form a Consortium. Maximum 2 (two) member of entities are allowed in a Consortium/ Joint Venture.</p> <p>In case of Consortium, both the member firms shall be a registered company OR firm in India registered under the relevant provisions/ Acts in India for the last three years as on the date of the issue of this RFP. In case of a joint venture the cumulative turnover of both the parties should satisfy the turnover criteria. Each party should at least account for 25% of the total turnover value.</p>	<p>Company incorporation certificate, Proprietorship Certificate, ROC registration, MoA of Company, AoA of Company, PAN, GST registration, etc. relating to business entity should be furnished</p>
2	<p>The agency should have undertaken, completed and maintained for the past two years at least 2 (two) projects of similar nature* for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities. The contract value for each of the project should be at least INR 4 crore. In case of joint venture/ Consortium, combined project experience of all entities shall be considered for evaluation.</p>	<p>Work Order & completion and maintenance certificate from client (signed and sealed on client's letter pad)</p>
3	<p>Financial Capacity: The agency should have a cumulative turnover of at least INR 8 Crores (Rupees Eight Crores) in any of the 3 (three) consecutive financial years in last 5 years (FY 2024-25, FY 2023-24, FY 2022-2023, FY 2021-2022, FY 2020-2021).</p>	<p>Certificate from Statutory Auditor/ Registered Chartered Accountant</p>
4	<p>The Bidder/ members of Consortium should not have been barred by the Central Government, any State Government, a statutory authority or a public sector undertaking, as the case may be, from participating in any project, and the bar subsists as on the date of the Proposal.</p>	<p>Self-Attested Undertaking/Declaration</p>

Only Eligible Bidders will be taken up for Technical and Financial Evaluation.

***Similar Projects:** Installation, Commissioning & Comprehensive Maintenance of at least 1 (one) Multi Source charged Off Grid Solar Inverter System with minimum capacity of 500KW & 1,000KW each for municipal/state/ central government, PSUs, any other government funded projects or any registered entities and having contract value of at least 4 crores per project.

3.2 Evaluation

The tender evaluation committee, appointed by MBMA as a whole, and each of its members individually, shall evaluate the proposals based on their responsiveness to, meeting minimum eligibility criteria requirements, applying the evaluation criteria, sub-criteria, and the point system specified in the tender document. Each responsive proposal will be given a technical score. A proposal shall be rejected at this stage if it does not respond to the laid criteria or if it fails to achieve the minimum technical score indicated in the tender document.

From the time the proposals are opened to the time the contract is awarded, if any bidders wish to contact the client on any matter related to its proposal, it should do so in writing at the address/email indicated in the data sheet. Any effort by the firm to influence the client in the client's proposal evaluation, proposal comparison or contract award decisions may result in the rejection of the Firm's proposal.

The mode of evaluation shall be based on the criteria specified in the tender document for technical and financial evaluation.

The bids of those Agencies which would meet the minimum conditions of eligibility specified in the section below will be evaluated in two stages:

- I. Technical evaluation of proposals by qualified bidders
- II. Financial bid opening of qualified bidders and final evaluation

3.3 Technical Evaluation and Financial Bid Opening

Only the bidders qualifying the eligibility criteria will be eligible for the technical evaluation. The Technical Proposal evaluation of eligible bidders will be done out of total 100 marks:

- I. The bidders are to submit documental evidence to show eligibility of each of the criteria applicable; else the score will remain NULL.
- II. **The tender evaluation committee reserves the right to undertake site visits to verify the information submitted proving eligibility of the bidder.**
- III. Bidders scoring at least 70 marks out of 100 in technical evaluation will be qualified for the Financial Bid opening.

- IV. Bidder quoting the lowest price will be the most preferred bidder for awarding the project.
- V. In case of tie between bidders in the lowest evaluated package price, the bidder having the highest financial turnover in the preceding 3 financial years will be given preference.

The Technical Evaluation of the proposals under Small Scale Category (30KW & 50KW) shall be based on following parameters:

Sno	Criteria	Marks	Documents required
Financial capacity and presence in NER (20)			
1	The Agency/ Lead member of Consortium must be in existence for at least a period of three years (5 marks) and should have a maintenance team based permanently out of Meghalaya (5 marks) .	10	- Certificate of Incorporation / Registration Certificate - Address of maintenance team in Meghalaya
2	The agency should have a cumulative turnover of at least INR 1 Crores (Rupees One Crore) in any 3 (three) consecutive financial years in last 5 years (FY 2024-25, FY 2023-24, FY 2022-2023, FY 2021-2022, FY 2020-2021). (10 marks for the firm with highest average annual turnover, other firms to be awarded pro-rated marks)	10	- Audited Balance Sheets and Profit & Loss Statements for last 5 financial years - Statutory Auditor's Certificate mentioning turnover for relevant years
Past Experience (40)			
3	The agency should have undertaken similar projects* of 'installation, commissioning & comprehensive maintenance of solar energy solutions' for industries/units in North-East Region. The minimum capacity of each such projects should be 30 Kw. (2.5 marks for each project)	10	- Work Orders / LoAs for each project - Completion Certificates / Client Certificates
4	The agency should have undertaken similar projects* of 'installation, commissioning & comprehensive maintenance of solar energy solutions' for industries/units in Meghalaya. The minimum capacity of each such projects should be 30 Kw. (5 marks for each project)	10	- Work Orders / LoAs from clients in Meghalaya - Completion Certificates or performance reports
5	In the last 5 (Five) years, the agency should have solely undertaken and completed 5 (five) similar projects of same nature* for municipal/state/ central government, PSUs, any other government funded projects or any registered entities. (2 marks for each project)	10	- Work Orders / LoAs from clients - Completion Certificates
6	The agency should have undertaken 5 (five) projects of similar nature* where AMC has been conducted for a minimum of three years (5 marks) and up to 5 years (10 marks) . AMC completed for 3 years: 5 marks AMC completed for 4 years: 7 years AMC completed for 5 years: 10 marks	10	- AMC Contracts / Agreements - Performance Certificates from clients confirming AMC duration and satisfactory service
Certification and accreditation (20)			
7	The agency with requisite certificates from authorised institutes/departments/bodies, preferably one or more of the following:	20	- IEC PV Module Qualification Certificate - BIS Certificate for PV Modules

	1. International Electrotechnical Commission (IEC) Photo voltaic (PV) module qualification certificate (5 marks) 2. Bureau of Indian Standards (BIS) for PV module (5 marks); NABL accredited lab report for Inverter (5 marks) and Battery (5 marks). 3. ISO 9001:2015 for quality management systems (5 marks)		- NABL Accredited Lab Report for Inverter & Battery - ISO 9001:2015 Certificate
Technical Presentation (20)			
8	Presentation on technology of multi-source charged off grid solar system; approach for delivery, installation and maintenance	20	- Can be presented later
Total		100	

***Similar Projects:** Installation, Commissioning & Comprehensive Maintenance of Multi Source charged Off Grid Solar Inverter System with minimum capacities of 30KW each for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities and having contract value of at least Rs 20 lakhs per project.

The Technical Evaluation of the proposals under Medium Scale Category (100KW & 200KW) shall be based on following parameters:

Sno	Criteria	Marks	Documents required
Financial capacity and presence in NER (20)			
1	The Agency/ Lead member of Consortium must be in existence for at least a period of three years (5 marks) and should have a maintenance team based permanently out of Meghalaya (5 marks).	10	- Certificate of Incorporation / Registration Certificate - Address of maintenance team in Meghalaya
2	The agency should have a cumulative turnover of at least INR 4 Crores (Rupees Four Crores) in any 3 (three) consecutive financial years in last 5 years (FY 2024-25, FY 2023-24, FY 2022-2023, FY 2021-2022, FY 2020-2021). (10 marks for the firm with highest average annual turnover, other firms to be awarded pro-rated marks)	10	- Audited Balance Sheets and Profit & Loss Statements for last 5 financial years - Statutory Auditor's Certificate mentioning turnover for relevant years
Past Experience (40)			
3	The agency should have undertaken similar projects* of 'installation, commissioning & comprehensive maintenance of solar energy solutions' for industries/units in North-East Region. The minimum capacity of each such projects should be 75 Kw. (2.5 marks for each project)	10	- Work Orders / LoAs for each project - Completion Certificates / Client Certificates
4	The agency should have undertaken similar projects* of 'installation, commissioning & comprehensive maintenance of solar energy solutions' for industries/units in Meghalaya. The minimum capacity of each such projects should be 75 Kw. (5 marks for each project)	10	- Work Orders / LoAs from clients in Meghalaya - Completion Certificates or performance reports
5	In the last 5 (Five) years, the agency should have solely undertaken and completed 5 (five) similar projects of same nature* for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities. (2 marks for each project)	10	- Work Orders / LoAs from clients - Completion Certificates

6	The agency should have undertaken 5 (five) projects of similar nature* where AMC has been conducted for a minimum of three years (5 marks) and up to 5 years (10 marks). AMC completed for 3 years: 5 marks AMC completed for 4 years: 7 years AMC completed for 5 years: 10 marks	10	- AMC Contracts / Agreements - Performance Certificates from clients confirming AMC duration and satisfactory service
Certification and accreditation (20)			
7	The agency with requisite certificates from authorised institutes/departments/bodies, preferably one or more of the following: 1. International Electrotechnical Commission (IEC) Photo voltaic (PV) module qualification certificate (5 marks) 2. Bureau of Indian Standards (BIS) for PV module (5 marks); NABL accredited lab report for Inverter (5 marks) and Battery (5 marks). 3. ISO 9001:2015 for quality management systems (5 marks)	20	- IEC PV Module Qualification Certificate - BIS Certificate for PV Modules - NABL Accredited Lab Report for Inverter & Battery - ISO 9001:2015 Certificate
Technical Presentation (20)			
8	Presentation on technology of multi-source charged off grid solar system; approach for delivery, installation and maintenance	20	-Can be presented later
Total		100	

***Similar Projects:** Installation, Commissioning & Comprehensive Maintenance of Multi Source charged Off Grid Solar Inverter System with minimum capacities of at least 75KW each for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities and having contract value of at least Rs 50 lakhs per project

The Technical Evaluation of the proposals under Large Scale Category (500KW & 1,000KW) shall be based on following parameters:

S.No	Criteria	Marks	Documents required
Financial capacity and presence in NER (20)			
1	The Agency/ Lead member of Consortium must be in existence for at least a period of three years (5 marks) and should have a maintenance team based permanently out of Meghalaya (5 marks).	10	- Certificate of Incorporation / Registration Certificate - Address of maintenance team in Meghalaya
2	The agency should have a cumulative turnover of at least INR 8 Crores (Rupees Eight Crores) in any 3 (three) consecutive financial years in last 5 years (FY 2024-25, FY 2023-24, FY 2022-2023, FY 2021-2022, FY 2020-2021). (10 marks for the firm with highest average annual turnover, other firms to be awarded pro-rated marks)	10	- Audited Balance Sheets and Profit & Loss Statements for last 5 financial years - Statutory Auditor's Certificate mentioning turnover for relevant years
Past Experience (40)			
3	The agency should have undertaken similar projects* of 'installation, commissioning & comprehensive maintenance of solar energy solutions' for industries/units in North-East Region. The minimum capacity of each such projects should be 200 Kw. (5 marks for each project – maximum of 10 marks)	10	- Work Orders / LoAs for each project - Completion Certificates / Client Certificates
4	The agency should have undertaken similar projects* of 'installation, commissioning & comprehensive maintenance of	10	- Work Orders / LoAs from clients in Meghalaya

	solar energy solutions' for industries/units in Meghalaya. The minimum capacity of each such projects should be 200 Kw. (5 marks for each project – maximum of 10 marks)		- Completion Certificates or performance reports
5	The agency should have undertaken 5 (five) projects of similar nature* where AMC has been conducted for a minimum of three years (5 marks) and up to 5 years (10 marks) . AMC completed for 3 years: 5 marks AMC completed for 4 years: 7 years AMC completed for 5 years: 10 marks	10	- AMC Contracts / Agreements - Performance Certificates from clients confirming AMC duration and satisfactory service
6	In the last 5 (Five) years, the agency should have solely undertaken and completed 5(five) similar projects of same nature* for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities. (2.5 marks for each project)	10	- Work Orders / LoAs from clients - Completion Certificates
Certification and accreditation (20)			
7	The agency with requisite certificates from authorised institutes/departments/bodies, preferably one or more of the following: 1. International Electrotechnical Commission (IEC) Photo voltaic (PV) module qualification certificate (5 marks) 2. Bureau of Indian Standards (BIS) for PV module (5 marks) ; NABL accredited lab report for Inverter (5 marks) and Battery (5 marks) . 3. ISO 9001:2015 for quality management systems (5 marks)	20	- IEC PV Module Qualification Certificate - BIS Certificate for PV Modules - NABL Accredited Lab Report for Inverter & Battery - ISO 9001:2015 Certificate
Technical Presentation (20)			
8	Presentation on technology of multi-source charged off grid solar system; approach for delivery, installation and maintenance	20	-Can be presented later
Total		100	

***Similar Projects:** Installation, Commissioning & Comprehensive Maintenance of Multi Source charged Off Grid Solar Inverter System with minimum capacities of at least 200kw each for municipal/ state/ central government, PSUs, any other government funded projects or any registered entities and having contract value of at least Rs 1 crore per project

3.4 Payment Schedule

The agency will be paid based on the following payment schedule:

S.No	Payment Phases	Fee Payable	Timeline	Percentage of Fee
1	Phase 1	Payment of 40% of the contract value will be made within 10 days of signing of the contract. This Advance Payment shall be adjusted against Invoices /bills raised by the successful Bidder.	Within 10 days of signing of the contract	40%

2	Phase 2	On successfully dispatching of materials from factory and receiving of invoice by MBMA		40%
3	Phase 3	Final Payment: 10% of the contract value will be made after acceptance of all documentation and success report from the unit that has powered by the solar unit, subject to approval from designated officers of the client.	After 1 Month	20%

The client will require 15 working days for release of payment for each milestone and raising of invoice. The Agency must ensure that any additional work done by the EMA has to be approved by the client, otherwise it will not be considered for payments.

All billed items are to be signed off by the officers deputed by the client regarding quantity, quality, and successful completion as per agreed timelines. These need to be backed up by relevant evidence (Photographs, Videos, Lists signed off by Competent Authority).

3.5 Cost of Logistics

The cost of transportation of the above-mentioned goods to Shillong and Tura, Meghalaya needs to be included in the cost of product.

4. Bid Submission

Steps to be followed for submission of bid:

4.1 The bid shall be submitted in three parts, the EMD, Technical Bid & the Price Bid.

- i. **Earnest money Deposit (EMD):** Bidder must submit EMD of the required amount of **Rs 10,00,000/-** in the form of a Demand draft.

Order drawn in favour of “Chief Executive Officer, Meghalaya Basin Management Agency” payable at Shillong. The EMD should be sealed in one envelope marked as “EMD”.

Earnest Money Deposit will not carry any interest: The EMD of unsuccessful bidders will be refunded on acceptance of the work order by the successful bidder. The EMD of the successful bidder will be returned/adjusted on submission of performance security.

The bid not accompanying EMD is liable to be rejected.

ii. **The Technical bid** must be sealed in another envelope marked as “Technical Bid” and shall contain the following:

- The bidder should supply the items as per the technical specifications mentioned in Annexure II.
- The bidder should have details as per Annexure-II, III and IV duly filled in, signed by authorized signatory, and complete in all respects. No alteration/modification in the format shall be permitted.
- A self-declaration that the tenderer has not been blacklisted by any State Government/ Central Govt. / PSU in India.
- Audited balance sheet and profit & loss account along with a copy of the acknowledgment of Income Tax return of last three financial years i.e. 2022-23, 2023-24, 2024-25.

iii. The Price bid shall be sealed in an envelope marked as “Price Bid” and shall contain the price bid as per Annexure V duly completed in all respects.

iv. The rate quoted should be inclusive of GST. No extra cost will be borne towards the transport of goods. No price increase on account of change in tax structure, duties, levies, charges, etc shall be permitted.

v. The three separate envelopes containing EMD, technical bid and price bid should be sealed in one envelope and should be addressed as per the tender schedule super-scribed as **“Tender for empanelment of agencies for Installation, Commissioning & Comprehensive Maintenance of Small (30 KW, 50 KW), Medium (100KW, 200KW) & Large (500KW & 1000 KW) scale categories of Multi Source charged Off Grid Solar Inverter System in various locations of the State of Meghalaya, under the Meghalaya Basin Development Authority”**.

5. General Terms and Conditions of the Bid

Note: Bidders must note the below-mentioned conditions carefully and comply strictly while submitting their bids:

5.1.1 Bidder shall prepare the bid and submit it in a sealed envelope addressed to **“Chief Executive Officer, Meghalaya Basin Management Agency, Shillong”** and send it through Speed Post/Registered Post/Courier only (no hand delivery will be entertained). Each envelope should bear the name of the bidder, along with the tender number.

However, the authorities shall not be responsible for postal and other delays in receipt of the bids.

- 5.1.2 Bidders are requested to check for any notice /amendment/ clarification etc. to the Tender Document through the website www.mbda.gov.in / www.mbma.org.in / Notice board of the office of MBMA- Shillong. No separate notification will be issued for such notice/amendment/clarification etc. in the print media or individually.
- 5.1.3 The Bidders should note that Prices should not be indicated in the technical bid and should be quoted only in the Price Bid as per Annexure V. In case the prices are indicated in the technical bid, the bid shall stand rejected.
- 5.1.4 For the **EVALUATION PROCESS** the Technical proposals will be evaluated based on compliance with eligibility criteria, technical specifications, and other terms & conditions stipulated in the tender document. The financial proposal will be opened only to those bidders who qualify for the technical evaluation. The Committee reserves the right to reject any or all the tenders without assigning any reason thereof.
- 5.1.5 The **AWARD OF CONTRACT** for Financial bids with the lowest price quotation for the assignment as per Annexure V will be considered for negotiations and award of the contract. However, where there is a tie between bidders in the lowest evaluated package price, the bidder having the highest financial turnover in the preceding 3 financial years will be given preference.
- 5.1.6 The **WARRANTY** of the PV modules, Inverters and Batteries which are to be Supplied should be NEW as of the date of receipt and should be having all components required. The entire System including accessories will remain under onsite comprehensive maintenance and warranty for a period of 25 years for the PV modules, 10 years for the inverter and 10 years for the batteries from the date of successful commissioning and testing with a robust Annual Maintenance mechanism. (**Warranty Documents of bidder's system to be enclosed**)
- 5.1.7 The bids not submitted in a prescribed format or in the prescribed manner, shall be rejected by the Tender Committee at the risk and responsibility of the bidder.

- 5.1.8 All the information as called for in the tender document should be submitted truly, clearly, legibly, transparently, unambiguously, and without using abbreviations.
- 5.1.9 In the financial bid the total figures should be written in figures followed by words
- 5.1.10 Each page of the tender document should be signed by the bidder with a seal, in token of having understood and accepted the terms and conditions of the contract, and serially numbered and a page marked.
- 5.1.11 **The bidder can withdraw from bidding on or before the last bid submission date.** The bidder or his authorized representative (one person only) will be allowed to be present at the time of opening of tenders.
- 5.1.12 The Tendering Authority reserves the right to accept any bid, and to annul the bid process and reject all bids at any time prior to award of contract, without assigning reasons & without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the action.
- 5.1.13 All transit risks shall be the responsibility of the supplier.
- 5.1.14 All the disputes shall be subject to the jurisdiction of Civil Courts situated in Meghalaya.
- 5.1.15 Any matter which has not been covered under these provisions shall be governed as per the provisions of MBMA.
- 5.1.16 If the work is found unsatisfactory or, if the firm dishonors the contract, the Performance Security Deposit may be forfeited, and the job may be entrusted to another firm. In this regard, the decision of the Committee is final and binding on the contractor.
- 5.1.17 Any notice given by one party to the other pursuant to this contract shall be sent in writing to **CEO- Meghalaya Basin Management Agency, Shillong.**
- 5.1.18 Payment Terms: All payments will be made within 30 days of submission of invoice, based on completion of respective terms & conditions. TDS will be deducted as per the rules. The invoice will be

raised in favour of **CEO- Meghalaya Basin Management Agency, Shillong.**

5.1.19 The work shall be COMPLETED in all respect within 120 days from the date of issue of work order.

Special Terms for this Tender

From previous experience the government has realized that bidding companies may find the remoteness of installation locations challenging and may not be able to deliver on their commitment.

Therefore, before allocating larger quantities of work, each empanelled agency will be asked to perform a demo of at least 200KW solar capacity at 1 location at the discovered L1 price with an objective to test the efficacy of the installed solar solution systems in remote geographies in Meghalaya. Machine load corresponding to the capacity should be made operational for a period of 1 week using the same setup.

Failure to timely and effectively perform during the demo installation will result in disqualification of the short-listed agency and their price-bid as well. In this case, the agencies who have demonstrated the efficacy of their installed units will be selected for empanelment and the lowest bid amongst them will be considered as the L1 price.

6. Annexure I - Technical Specifications

The proposed project shall be commissioned as per the technical specifications provided in the RFP. Any shortcomings will lead to the cancellation of the Letter of Award & the Competent Authority's decision will be final and binding on the bidder.

Technical Specification for 30kW Multi Source charged Off Grid Solar Inverter System has been detailed for reference of the agencies bidding for the tender. The agencies shall refer to the below list of materials

SI.NO	Material	Capacity	Quantity
1	Solar Modules 72 cells	550W	55Nos
2	Solar Battery, Tabular Battery Lead Acid C10 Rated	72000 Wh	1
3	MMS Ground Mounted (For all modules)		1
4	Solar Array Junction Box (AJB) with SPD and MCB	1000VDC 63A	1
5	SOLAR PCU with multisource charger 50kVA	360VDC, 50kVA	1
6	Remote Monitoring System (Single Phase) with 2 Channel T& H Module		1
7	DC Charger connected with EB	360-420VDC, 8kVA	1
8	DC Charger connected with DG	360-420VDC, 8kVA	1
9	Automatic Charger Control Unit as per charger specification		1
10	Copper Cable (RED + BLACK)	6 Sq.mm	As per site
11	Copper Cable (RED + BLACK)	50 Sq.mm	As per site
12	Copper Cable (RED + BLACK)	25 sq.mm	As per site
13	Isolator For battery	415V 160A	1
14	MCB Four pole	415VAC, 63A	1
15	MCCB Four pole	415VAC, 32A	1
16	Earth conductor	50sqm Aluminium	As per site
17	Lightning Arrestor set		1

Note: *Maximum Grid/ DG Capacity- 8kVA (30%) **Maximum Load Capacity- 24kW

The system should be designed to operate continuously 24 hours a day without interruption. At any point in time, the load supported by the system shall not exceed 80% of the installed panel capacity. To ensure uninterrupted operation, grid power and diesel generator (DG) support shall be provided as auxiliary power, sized at approximately 30% of the installed panel capacity.

Technical Specification for 50kW Multi Source charged Off Grid Solar Inverter System has been detailed for reference of the agencies bidding for the tender. The agencies shall refer to the below list of materials

SI.NO	Material	Capacity	Quantity
1	Solar Modules 72 cells	550W	90
2	Solar Battery, Tabular Battery Lead Acid C10 Rated, 2V high rated AH (200AH- 1200AH)	108000 Wh	1
3	MMS Ground Mounted (For all modules)		1
4	Solar Array Junction Box (AJB) with SPD and MCB	1000VDC 100A	1
5	SOLAR PCU with multisource charger- 80kVA	360VDC, 80kVA	1
6	Remote Monitoring System (Single Phase) with 2 Channel T& H Module		1
7	DC Charger connected with EB	360- 420VDC, 15kVA	1
8	DC Charger connected with DG	360- 420VDC, 15kVA	1
9	Automatic Charger Control Unit as per charger specification		1
10	Copper Cable (RED+BLACK)	6 Sq.mm	As per site
11	Copper Cable (RED+BLACK)	25 Sq.mm	As per site
12	Copper Cable (RED+BLACK)	50 Sq.mm	As per site
13	Battery Isolator	415V, 160A	1
14	MCB Four pole	415VAC, 100A	2
15	MCB Four pole	415VAC, 63A	3
16	Earthing Kit		3
17	Earthing Cable Aluminim	50 sq.mm	As per site
18	Lightning Arrestor set		1

Note: * Maximum Grid/ DG Capacity- 15kVA **Maximum Load Capacity- 48kW

The system should be designed to operate continuously 24 hours a day without interruption. At any point in time, the load supported by the system shall not exceed 80% of the installed panel capacity. To ensure uninterrupted operation, grid power and diesel generator (DG) support shall be provided as auxiliary power, sized at approximately 30% of the installed panel capacity.

Technical Specification for 100kW Multi Source charged Off Grid Solar Inverter System has been detailed for reference of the agencies bidding for the tender. The agencies shall refer to the below list of materials

SI.NO	Material	Capacity	Quantity
1	Solar Modules 72 cells	550W	182
2	Solar Battery, Tabular Battery Lead Acid C10 Rated, 2V high rated AH (200AH- 1200AH)	216000 Wh	1
3	MMS Ground Mounted (For all modules)		1
4	Solar Array Junction Box (AJB) with SPD and MCB	1000VDC 100A	2
5	SOLAR PCU with multisource charger-160kVA	360VDC, 80kVA	2
6	Remote Monitoring System (Single Phase) with 2 Channel T& H Module		1
7	DC Charger connected with EB	360-420VDC, 40kVA	1
8	DC Charger connected with DG	360-420VDC, 40kVA	1
9	Automatic Charger Control Unit as per charger specification		1
10	Copper Cable (R+B) to Solar Module	6 Sq.mm	As per site
11	Copper Cable (R+B) Module to Inverter	50Sq.mm	As per site
12	Copper Cable (R+B) Battery to Inverter	95Sq.mm	As per site
13	Battery Isolator	415V , 315A	2
14	MCCB Four pole	415VAC, 315A	1
15	MCB Four pole	415VAC, 100A	2
16	Earthing Kit		3

17	Aluminium Earthing Cable	50 sq.mm	As per site
18	Lightning Arrestor set		2

Note: *Maximum Grid/ DG Capacity- 40kVA **Maximum Load Capacity- 130kW

The system should be designed to operate continuously 24 hours a day without interruption. At any point in time, the load supported by the system shall not exceed 80% of the installed panel capacity. To ensure uninterrupted operation, grid power and diesel generator (DG) support shall be provided as auxiliary power, sized at approximately 30% of the installed panel capacity.

Technical Specification for 200kW Multi Source charged Off Grid Solar Inverter System has been detailed for reference of the agencies bidding for the tender. The agencies shall refer to the below list of materials

SI.NO	Material	Capacity	Quantity
1	Solar Modules 72 cells	550W	364
2	Solar Battery, Tabular Battery Lead Acid C10 Rated, 2V high rated AH (200AH- 1200AH)	400000 Wh	1
3	MMS Ground Mounted(For all modules)		1
4	Solar Array Junction Box (AJB) with SPD and MCB	1000VDC 100A	4
5	SOLAR PCU with multisource charger- 300kVA	360VDC, 150kVA	2
6	Remote Monitoring System(Single Phase)with 2 Channel T& H Module		1
7	DC Charger connected with EB	360-420VDC, 70kVA	1
8	DC Charger connected with DG	360-420VDC, 70kVA	1
9	Automatic Charger Control Unit as per charger specification		1
10	Copper Cable (R+B) to Solar Module	6 Sq.mm	As per site
11	Copper Cable (R+B) Module to Inverter	50 Sq.mm	As per site
12	Copper Cable (R+B) Battery to inverter	120 Sq.mm	As per site
13	Battery Isolator	415V, 400A	1
14	MCCB Four pole	415VAC, 400A	1
15	MCCB Four pole	415VAC, 250A	2
16	Earthing Kit		3
17	Aluminium Earthing cable	50 sq.mm	As per site
18	Lightning Arrestor set		3

Note: *Maximum Grid/ DG Capacity- 70kVA **Maximum Load Capacity- 240kW

The system should be designed to operate continuously 24 hours a day without interruption. At any point in time, the load supported by the system shall not exceed 80% of the installed panel capacity. To ensure uninterrupted operation, grid power and diesel generator (DG) support shall be provided as auxiliary power, sized at approximately 30% of the installed panel capacity.

Technical Specification for 500kW Multi Source charged Off Grid Solar Inverter System has been detailed for reference of the agencies bidding for the tender. The agencies shall refer to the below list of materials

SI.NO	Material	Capacity	Quantity
1	Solar Modules 72 cells	550W	910
2	Solar Battery, Tabular Battery Lead Acid C10 Rated, 2V high rated AH (200AH- 1200AH)	10,00,000 Wh	1
3	MMS Ground Mounted(For all modules)		1
4	Solar Array Junction Box (AJB) with SPD and MCB	1000VDC 100A	12
5	SOLAR PCU with multisource charger-600kVA	360VDC, 300kVA	2
6	Remote Monitoring System (Single Phase) with 2 Channel T& H Module		1
7	DC Charger connected with EB	360-420VDC, 140kVA	2
8	DC Charger connected with DG	360-420VDC, 140kVA	2
9	Automatic Charger Control Unit as per charger specification		1
10	Copper Cable (R+B) to Solar Module	6 Sq.mm	As per site
11	Copper Cable (R+B) Module to Inverter	50 Sq.mm	As per site
12	Copper Cable (R+B) Battery to inverter	120 Sq.mm	As per site
13	Battery Isolator	415V, 800A	2
14	MCCB Four pole	415VAC, 400A	2
15	MCCB Four pole	415VAC, 800A	1
16	Earthing Kit		3

17	Copper Earthing Cable, Green	10 sq.mm	35m
18	Lightning Arrestor set		3

Note: *Maximum Grid/ DG Capacity- 140kVA **Maximum Load Capacity- 480kW

The system should be designed to operate continuously 24 hours a day without interruption. At any point in time, the load supported by the system shall not exceed 80% of the installed panel capacity. To ensure uninterrupted operation, grid power and diesel generator (DG) support shall be provided as auxiliary power, sized at approximately 30% of the installed panel capacity.

Technical Specification for 1000kW Multi Source charged Off Grid Solar Inverter System has been detailed for reference of the agencies bidding for the tender. The agencies shall refer to the below list of materials

SI.NO	Material	Capacity	Quantity
1	Solar Modules 72 cells	550W	1820
2	Solar Battery, Tabular Battery Lead Acid C10 Rated, 2V high rated AH (200AH- 1200AH)	2000,000 Wh	1
3	MMS Ground Mounted(For all modules)		1
4	Solar Array Junction Box (AJB) with SPD and MCB	1000VDC 160A	24
5	SOLAR PCU with multisource charger- 1200kVA	360VDC, 300kVA	4
6	Remote Monitoring System(Single Phase)with 2 Channel T& H Module		1
7	DC Charger connected with EB	360-420VDC, 280kVA	4
8	DC Charger connected with DG	360-420VDC, 280kVA	4
9	Automatic Charger Control Unit as per charger specification		1
10	Copper Cable (R+B) Module to Module	6 Sq.mm	As per site
11	Copper Cable (R+B) Module to Inverter	50 Sq.mm	As per site
12	Copper Cable (R+B) Battery to Inverter	120 Sq.mm	As per site
13	Isolator	1.5 sq.mm	As per site
14	MCCB Four pole	415VDC, 1600A	4
15	MCCB Four pole	415VAC, 400A	4
16	Earthing Kit	415VAC, 800A	2
17	Aluminium Earthing Cable	50 sq.mm	As per site
18	Lightning Arrestor set		6

Note: *Maximum Grid/ DG Capacity- 280kVA **Maximum Load Capacity- 960kW
The system should be designed to operate continuously 24 hours a day without interruption. At any point in time, the load supported by the system shall not exceed 80%

of the installed panel capacity. To ensure uninterrupted operation, grid power and diesel generator (DG) support shall be provided as auxiliary power, sized at approximately 30% of the installed panel capacity.

Technical Specification of the Solar Components for 30 KW, 50 KW, 100KW, 200KW, 500KW & 1000 KW Multi Source charged Off Grid Solar Inverter System

The proposed project shall be commissioned as per the technical specifications given below. Any shortcomings will lead to the cancelation of the Letter of Award & the Competent Authority's decision will be final and binding on the bidder.

I. Solar PV Module:

The PV modules used must qualify to the latest edition of the IEC PV module qualification test.

- The total solar PV array capacity should not be less than the allocated capacity and should comprise of solar crystalline modules of minimum Wp mentioned in the bill of materials/ above wattage. Module capacity less than the minimum the mentioned Wp shall not be accepted.
- PV modules must be tested and approved by one of the IEC-authorized test centres. The module frame shall be made of corrosion-resistant materials, preferably having anodized aluminium.
- The panels should have IEC 61215 with 5000 Pa load handling capacity for cyclone resilient.

The following information must be mentioned in the ID used on each module (This can be inside or outside the laminate but must be able to withstand harsh environmental conditions).

- Name of the manufacturer of the PV module.
- I-V curve for the module Wattage, I_{max}, V_{max}, and FF (Fill Factor) for the module
- Unique Serial No and Model No of the module

Materials Warranty

- Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period **not less than twenty five (25) years** from the date of sale to the original customer ("Customer")
- Defects and/or failures due to manufacturing.
- Defects and/or failures due to quality of materials
- Non-conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owner's sole option.

Performance Warranty

The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25-year period and not more than 10% after first ten years period of the full rated original output

Preferred Make

MNRE Approved (Empanelled) (WAREE, VIKRAM, MICROSUN, KOTAK, EMMVEE, ENFROS, HHV- SWELECT) or Any Reputed Make

II. MOUNTING STRUCTURE

- a. Hot dip galvanized MS/ anodized aluminium of size not less than 50 mm x 50 mm x 6 mm size shall be used for mounting the modules/ panels/arrays. Each structure should have an angle of inclination as per the site conditions to take maximum irradiation.
- b. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels. Installation of solar structures should not damage the roof in any way. If any concrete or foundation is required, it should be precast type.
- c. South facing with 22 degrees inclined towards north should be followed despite whatever roofing type is. The structure also should be able to withstand wind speed of 200 - 250 km/h.

III. DC COMBINER BOX/ARRAY JUNCTION BOX:

- a. The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands
- b. Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification

IV. BATTERY:

- Lead Acid Battery
- All the batteries should have a C/10 rate of discharge. The voltage of each battery should be of 2 V and Higher AH (200AH to 1200AH)
- PSOC Compatible

- Battery should conform to the latest BIS/ International standards. A copy of the relevant test certificate for the battery should be furnished.
- The battery should be **warranted for a minimum of 10 years.**
- The battery should be installed inside the premises of consumers on a Battery rack of acid resistant material to bear the required battery load. The non-reactive acid proof mat should be provided around the floor space of the battery bank.

Preferred Make

(Exide/ Galleon/ Power build/ Zoladyne) or ERTL/ NABL Approved

V. PCU/ INVERTER/ INTELLIGENT ENERGY MANAGEMENT SYSTEM:

The power conditioning unit should be provided to convert DC power produced by SPV modules, into AC power. Typical technical features of the inverter shall be as follows:

Power conditioning unit with inbuilt charge controller of capacity & ratings as specified in the below for various capacity of Solar Power Plants should convert DC power into AC power and must conform to standards IEC 61683.

The PCU will have the following features:

- IGBT based MPPT charging
- 3 Phase Output and voltage 230V, +/-3% pure sine wave for each phase.
- Output frequency: 50 Hz, +/- 0.5 Hz
- Capacity of PCU/ Inverter is specified at 0.8 lagging power factor
- THD: less than 3% Efficiency: >85% at full load
- Ambient Temp 50 degree Celsius (max.)
- Operating humidity 95% maximum
- Resilient in handling Industrial Loads

Protections:

- Over voltage (automatic shutdown)
- Under voltage (automatic shutdown)
- Overload - Short circuit (circuit breaker & electronics protection against sustained fault)
- Over Temperature
- Battery, PV reverse polarity

Indicators

- Array on
- MPPT charger on
- Battery connected, charging
- Inverter ON
- Load on solar/ battery
- Grid charger on

- Load on Grid
- Grid on
- Fault

Display Parameters

- Charging current
- Charging voltage
- Voltage of PV panels
- Output voltage
- Grid voltage
- Inverter loading (kW) & Energy Generation (kWh)
- Output frequency
- Fault / fault code

Cooling: Air Cooled

Inverter / Intelligent Energy Management System (IEMS)

- The entire load connected to the IEMS will draw power from an energy reservoir-battery bank
- Battery charging current can be drawn from Solar, Grid, or DG, alone or in combination.
- Selects the solar power as its first priority as it is the cheapest source of power for battery charging.
- When solar power is not available for charging batteries, grid power will be used.
- In the absence of Grid power, a de-rated DG operation will be sufficient for charging batteries.
- The charging source selection and mode of operation are governed by a fully digital and automated control system, eliminating the need for manual changeovers during normal operation. Solar based charging will be controlled by PCU and DC chargers will work automatically with power sources as Electricity Grid or Diesel Generator or Electricity Grid + Diesel Generator modes.
- Manual changeover is required only under fault or failure conditions of the Power conditioning unit. In such scenarios, required emergency loads only can be manually switched to EB or DG whereas critical loads cannot be changed over since EB or DG cannot meet its demand.
- The demand drawn from the Electricity Grid connection or Diesel Generator set is limited to 30% of the maximum connected electrical load, optimizing both grid dependency and fuel consumption.

The PCU/Inverter/IEMS should have **warranty for a minimum of 10 years.**

The PCU/ Inverters/ IEMS should be tested from the MNRE approved test centers / NABL /BIS accredited testing- calibration laboratories. In the case of imported power conditioning units, these should be approved by international test houses.

Preferred Make: Glow power, Luminous, Eastman, Zoladyne, Equivalent make

VI. REMOTE MONITORING SYSTEM:

Remote monitoring is the ability to visualize, track, and control assets and facilities without having to be on-premises. This capability is made possible through numerous technologies such as wireless networks, sensors, transmitters, receivers, data processing, cloud storage, and analytics. Together, these technologies provide greater visibility into asset performance, predict equipment failure, and reduce resource consumption, enabling cost-effective and efficient operations all the time. Centralized monitoring Accurate monitoring improved team efficiency faster response to incidents Compliance to regulatory requirements Business continuity in the event of disasters Lower operating costs.

Specifications:

The system should be able to monitor the Following Parameters

1. Solar, Battery, Grid, Inverter input, Output voltages, units consumed etc
2. Battery Charging and Discharging, Solar, Grid and Load Currents.
3. Solar and Grid Peak Voltages.
4. Battery, Grid and Load Peak Currents.
5. 2 Channels of Temperature and Humidity.
6. Recharge and Server charges for 1 year should be provided.
7. Two different Login should be provided for Department and User.
8. Storage of Data should be there for at least 2 years.
9. Alerts, Consumption and Generation Data should be sent through E-Mail every day.
10. Provision to Remotely Shutdown the Inverter should be provided in the Software Application.

VII. PROTECTIONS

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding.

VIII. LIGHTNING PROTECTION

The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall

be suitably protected against Lightning by deploying the required number of Lightning Arresters. Lightning protection should be provided as per IEC 62305 standards.

IX. CABLES

Cable sizes must be used as per the system size in the Project shall have the following characteristics:

- Temp. Range: – 10°C to +80°C.
- Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- Flexible
- Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be selected to keep the voltage drop (power loss) of the entire Project to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e., twenty-five (25) Operational Years.

X. PREFERRED MODE

Polycab, Finolex, Havells, KEI, RR Kabels.

7. Annexure II: Letter of Technical Proposal

Date:

To,
CEO - MBMA,
Meghalaya Basin Management Agency
Government of Meghalaya
Meghalaya State Housing Financing & Cooperative Society,
Upper Nongrim Hills,
Meghalaya, Shillong – 793003

Sub: Tender for empanelment of agencies for installation, commissioning & comprehensive maintenance of solar energy solutions in various locations of the State of Meghalaya, under the Meghalaya Basin Development Authority

Regarding Technical Proposal

Dear Sir,

1. With reference to the RFP dated _____ for the above captioned project, and clarification issued by MBMA, Government of Meghalaya thereof, We _____, having examined all relevant documents and understood their contents, hereby submit our Proposal for selection as _____. The proposal is unconditional and unqualified.
2. All information provided in the Proposal and in the Appendices is true and correct and all documents accompanying such Proposal are true copies of their respective originals.
3. This statement is made for the express purpose of appointment as the Agency for the aforesaid Project.
4. We shall make available to the Government of Meghalaya any additional information it may deem necessary or require for supplementing or authenticating the Proposal.
5. We acknowledge the right of the Government of Meghalaya, to reject our application without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.

6. We certify that in the last three years, we or any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.

We declare that:

- a. We have examined and have no reservations to the RFP Documents, including any Addendums issued by the Government of Meghalaya.
- b. We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, in respect of any tender or request for proposal issued by or any agreement entered into with the Government of Meghalaya or any other public sector enterprise or any government, Central or State; and
- c. We hereby certify that we have taken steps to ensure that, no person acting for us or on our behalf will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
- d. We understand that you may cancel the Selection Process at any time and that you are neither bound to accept any Proposal that you may receive nor to select the Agency, without incurring any liability to the Bidders.
- e. If our Firm is qualified, we shall make our technical proposal to the Government of Meghalaya on the date specified upon intimation received from the Government of Meghalaya.
- f. The undersigned is authorized to sign the documents being submitted through this RFP. (A copy of Power of Attorney may be enclosed)
- g. In the event our firm is selected as the Agency for this project we shall enter into a contract with the Government of Meghalaya.
- h. The Financial Proposal is being submitted in a separate cover. This Technical Proposal read with the Financial Proposal shall constitute the Application which shall be binding on us.
- i. The information provided herewith is true and correct to our best knowledge. If any discrepancies are found in the information provided or if the information provided is not correct, our firm would be fully responsible for that. We understand in such cases our bids are liable to be rejected.

Yours faithfully,

(Signature, name and designation of the authorized signatory/ authorized signatory of Lead Member in case of Consortium) (Name and seal of the Bidder)

8. Annexure III: Details of the Organisation

1	Name and address of the Supplier (With pin code)	
2	Year of starting the organization & registration number (photocopy of registration certificate or any other relevant document to be enclosed)	
3	Name and Contact number of the Proprietor or Point of Contact	
4	Status of Supplier	Proprietorship / Partnership/ Pvt Ltd / Limited/others
5	GSTIN and PAN No. of Income Tax Dept. (Photocopy of Income Tax (IT)) returns for the last 2 Financial Year years to be enclosed	
6	Audit reports for the last 3 years (Certified copy of Chartered Account' report in P&L account to be enclosed)	
7	Experience of Supplier/supplier relating to supply of solar energy-based solutions (supporting certificates to be enclosed)	
8	Particulars of Physical Infrastructure and total strength of staff available in the organization relating to Supplier/supply/testing etc.,	

Note: In case of Joint Venture/ Consortium, details of all consortium members to be enclosed

Signature of the bidder and address with seal

Date:

9. Annexure III – Appendix A

(Format of Power of Attorney to Authorized Signatory for single entity applicant)

(To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant Stamp Act.)

We, (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr. / Ms. (Name), son/daughter/wife of and presently residing at, who is presently employed with us and holding the position of, as our true and lawful attorney (hereinafter referred to as the “Attorney”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our EOI for _____.

including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders’ and other conferences and providing information / responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the said Project and/or upon award thereof to us and/or till the entering into of the Agreement with the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE,, THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF, 2024.

For.....

(Signature, name, designation and address)

Witnesses:

1

2

Accepted Notarized

(Signature, name, designation and address of the Attorney)

Note:

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.*
- *Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution / power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*

10. Annexure III – Appendix B

(Model Format of Power of Attorney to Authorized Signatory for Lead Member of JV / Consortium)

(To be executed by all members of the Consortium in favour of the Lead Member)

(To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant Stamp Act.)

Whereas Meghalaya Basin Management Agency ("MBMA") has invited proposals from agency for _____ (EOI Name).

Whereas, _____ and _____ (collectively the "JV/ Consortium") being Members of the JV / Consortium are interested in submitting the EOI in accordance with the terms and conditions of the EOI and other connected documents in respect of the EOI, and

Whereas, it is necessary for the members of the Consortium to designate one of them as the Member in Charge with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's bid for the assignment and its execution.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS

We, [name of Party] having our registered office at [registered address], M/s. [name of Party], having our registered office at [registered address], and M/s. [name of Party], having our registered office at [registered address], (hereinafter collectively referred to as the "Principals") do hereby irrevocably designate, nominate, constitute, appoint and authorise M/s [name of Member In - charge], having its registered office at [registered address], being one of the Members of the Consortium, as the Member In-charge and true and lawful attorney of the Consortium (hereinafter referred to as the "Attorney") and hereby irrevocably authorise the Attorney (with power to sub-delegate to any person) to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the Contract, during the performance of the services related to the EOI, and in this regard, to do on our behalf and

on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the submission of this EOI, including but not limited to signing and submission of all applications, bids and other documents and writings, accept the Letter of Acceptance, participate in pre-bid and other conferences, respond to queries, submit information/documents, sign and execute contracts and undertakings consequent to acceptance of the Application of the Consortium and generally to represent the Consortium in all its dealings with the Authority, and / or any other government agency or any person, in all matters in connection with or relating to/ or arising out of the Consortium's Application for the EOI and / or upon award thereof until the Contract is entered into with the Authority.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us / Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS _____ DAY OF _____ 2026

For

(Signature Name & Title)

For

(Signature, Name & Title)

(Executants) (To be executed by all the Members of the Consortium)

Witnesses:

- 1.
- 2.

Note:

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.*
- *Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution / power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*

11. Annexure III – Appendix C

Letter of Declaration

To,

CEO - MBMA,

Meghalaya Basin Management Agency

Government of Meghalaya

Meghalaya State Housing Financing & Cooperative Society,

Upper Nongrim Hills,

Meghalaya, Shillong – 793003

Dear Sir/Madam,

We hereby certify and confirm that:

1. We have not been suspended or been blacklisted or debarred by any Central/ State Government/ agency of Central/ State Government/ Public Sector Undertaking/ Regulatory Authority of India at the time of submission of this EoI.
2. We are not under liquidation, court receivership or similar proceedings, should not be bankrupt. Bidder to upload undertaking to this effect with bid.

Signature of the Applicant with seal:

Dated this __ day of ___ of 20__

Name of the bidder: -

Designation: -

(In case of Consortium, to be submitted by all members)

Financial Analysis-Details to be furnished duly supported by figures in balance sheet/profit & loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

12. Annexure III – Appendix D

Format for Annual Turnover Certificate

Years	FY 2024-25	FY 2023-24	FY 2022-23	FY 2021-22	FY 2020-21
Annual Turnover (in Rs.)					

Signature of Chartered Accountant with seal and registration number

Signature of Authorized Signatory of Applicant (s)

Seal of Applicant

Note:

- Details to be furnished duly supported by figures in balance sheet/profit & loss account for the last five years duly certified by the Statutory Auditor/ Registered Chartered Accountant.
- In case of JV/ Consortium, the form needs to be provided for all the consortium members

13. Annexure III – Appendix D

Format for Project Experience

S. No.	Name of Project	Brief Scope of the work	Cost of Project	Name of client Department	Start date of Project (Month/Year)	Completion date of Project (Month/Year)	Remark (if any)
1							

Signature of Authorized Signatory of Applicant (s):

Seal of Applicant:

Note:

- All projects claimed should be supported by documentary evidence (Letter of Award, Completion certificate etc.)
- In case of JV/ Consortium, all members need to enclose the form.

14. Annexure IV – Document Enclosure form

Sno	Description	Whether the Document is enclosed or not	Page No. From and to
1	Details of Organization as per Table –I	YES/NO	
2	Copies showing the legal status, places of registration and principal place of business of the firm	YES/NO	
3	Copies of CA certificate for Turnover and audited financial statements for the last 5 (five) financial years	YES/NO	
4	Copies of GST registration and GST returns filled in the last 2 financial years	YES/NO	
5	Copies of income tax registration and income tax returns filled in the last 2 financial years	YES/NO	
6	Acceptance to give warranty as per technical specification for PV Modules, Battery and IEMS for trouble free operation and maintenance.	YES/NO	
7	Address of the nearest official Service Centre of the company.	YES/NO	
8	Letter of declaration to confirm that the bidder has not been blacklisted by any State Government/ Central Govt. / PSU in India	YES/NO	
9	BID security in the form of cheque or DD from a Nationalized Bank drawn in favour of “The Chief Executive Officer’ Meghalaya Basin Management Agency; Shillong, Meghalaya” for a value of Rs. _____	YES/NO	
10	Power of Attorney as per the format enclosed	YES/NO	
11	Details of project experience as per the format enclosed along with the documentary evidence	YES/NO	
12	Warranty Certificate issued for any installed system for 10 years (Battery and Inverter/Intelligent Energy Management System)	YES/NO	

12	All other documents mentioned in the Minimum Eligibility Criteria and the Technical Criteria	YES/NO	
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I abide by all the above terms & conditions.

SIGNATURE OF THE AUTHORIZED SIGNATORY OF THE BIDDER and with office seal

PLACE:

DATE:

15. Annexure V - PRICE BID

PARTICULARS TO BE SUBMITTED IN THE FINANCIAL BID (SECOND COVER).

Price Schedule for Tender for empanelment of agencies for Installation, Commissioning & Comprehensive Maintenance of Small (30 KW, 50 KW), Medium (100KW, 200KW) & Large (500KW & 1000 KW) scale categories of Multi Source charged Off Grid Solar Inverter System in various locations of the State of Meghalaya, under the Meghalaya Basin Development Authority rates quoted by the bidder:

- I. The rates should be mentioned item wise clearly both in words and figures Item-wise details of rates quoted.
- II. Rates should be inclusive of GST.
- III. Rates should be inclusive of Annual Maintenance Contract (AMC) from Year 2 to 10 but separately mentioned.
- IV. Rates should include an average transportation cost for supply of solution category in the region of operation of the bidder.

CONDITIONS:

1. If our tender is accepted, we hereby undertake to abide as per the stipulated Terms and Conditions to supplier and supply, installation and maintenance of solar energy-based solutions.
2. We agree to abide by this tender and if the work is awarded to us, in executing the above contract we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of corruption act 1988".
3. We understand that you are not bound to determine the price based on the lowest offer that MBMA may receive.
4. We accept that all disputes between parties will be adjudicated by a competent court in Shillong, Meghalaya, India.

Line Item	Description of Goods	Qty	Unit Cost	Total Cost of Systems	AMC Unit Cost for 9 years	Total AMC Cost for 9 years
Small Scale Category (50KW & 100KW)						
Lot#1	Installation, Commissioning & Comprehensive Maintenance of 30 KW Multi Source charged Off Grid Solar Inverter System	5				
Lot#2	Installation, Commissioning & Comprehensive Maintenance of 50 KW Multi Source charged Off Grid Solar Inverter System	5				
Medium Scale Category (100KW & 200KW)						
Lot#3	Installation, Commissioning & Comprehensive Maintenance of 100 KW Multi Source charged Off Grid Solar Inverter System	3				
Lot#4	Installation, Commissioning & Comprehensive Maintenance of 200 KW Multi Source charged Off Grid Solar Inverter System	3				
Large Scale Category (500KW & 1,000KW)						
Lot#5	Installation, Commissioning & Comprehensive Maintenance of 500 KW Multi Source charged Off Grid Solar Inverter System	1				
Lot#6	Installation, Commissioning & Comprehensive Maintenance of 1000 KW Multi Source charged Off Grid Solar Inverter System	1				

I, _____ (Name of signatory) on behalf of the bidder _____ (Name of the bidder), hereby certify that I have noted the technical specifications of solutions

mentioned in Annexure I and the prices quoted above are as per the details specified and in compliance with Annexure I.

Dated this..... day of..... 2024

Signature

(Name and Address of the Tender with seal)

(In the capacity of..... Duly authorized to sign the Tender for and on behalf of _____)