

Request for Quote (RFQ): Photovoltaic (PV) Modules

1. Executive Summary

The Cooperativa Hidroeléctrica de la Montaña is issuing this Request for Quote (RFQ) CHM-PVM-001 for the procurement of photovoltaic (PV) modules to support the implementation of Phase 2 of its ReEnFoCo – Community Energy Resilience Hubs (CERH) program. This phase will deploy ten (10) community microgrids across Puerto Rico's Central Mountain Range, each featuring approximately 87.5 kW of photovoltaic generation and 185 kWh of battery storage. The requested PV modules must meet the highest standards of quality, efficiency, durability, and resistance to local environmental conditions, while complying with the Build America, Buy America (BABA) Act, LUMA Energy interconnection requirements, and all applicable UL, IEC, and ISO certifications.

The objective of this RFQ is to identify qualified suppliers capable of providing high-efficiency, high-reliability PV modules that ensure long-term performance and compliance with regulatory and technical standards under Puerto Rico's operating conditions. Suppliers will be evaluated based on cost per watt (USD/Wp), module efficiency and performance, warranty coverage, certification compliance, delivery capability, and supplier reliability. Initial delivery is expected no later than 01FEB26 in Utuado, Puerto Rico, with full documentation, warranty certificates, and technical datasheets required.

Through this procurement, the Cooperative aims to strengthen community energy resilience, advance the deployment of distributed renewable generation, and establish a foundation for the continued expansion of microgrids throughout Puerto Rico's Central Mountain Region.

2. Background

2.1. Requester Information

Company Name:	Cooperativa Hidroeléctrica de la Montaña
Point of Contact:	Ana Maria Ruíz Montero Program Manager, Renewable Energy microrred@cooperativahidroelectrica.coop +1.939.300.4437, Ext. 0005

2.2. Cooperativa Hidroeléctrica de la Montaña

The Cooperativa Hidroeléctrica de la Montaña is the first electric service cooperative in Puerto Rico. Its mission is to provide cost-effective and resilient energy from renewable sources to improve the quality of life of its Member-Owners in the municipalities of Adjuntas, Jayuya, Lares, Maricao, and Utuado. The Cooperativa empowers residents in creating energy solutions with the objective of building more resilient communities in Puerto Rico's Central Mountain Range, thereby ending community vulnerability caused by the lack of a reliable and resilient electric service.

The Cooperativa Hidroeléctrica de la Montaña's ReEnFoCo program aims to install 10 megawatts (MW) of rooftop solar energy and 20 megawatt-hours (MWh) of battery storage configured as microgrids throughout the Central Mountain Range. These grid-connected microgrids will include an automatic bimodal controller that will allow system isolation during grid interruptions, ensuring continuous electricity supply to the Cooperativa's Member-Owners and community members. This ambitious effort reflects the determination of the communities of the Central Mountain Range to take control of the critical components of their energy infrastructure and guarantee access to resilient electricity in the face of extreme weather events and the instability of the traditional electric system. By continuously involving its Member-Owners, the Cooperative ensures that decisions respond to local needs and that the project's benefits are shared equitably among business owners and residents.

2.3. Goals & Objectives

As part of Phase 2 of the ReEnFoCo Project – Community Energy Resilience Hubs (CERH) – the Cooperativa Hidroeléctrica de la Montaña is developing ten (10) community microgrids, each with 87.5 kW of photovoltaic generation and 185 kWh of battery storage. For the implementation of these microgrids, the acquisition of photovoltaic modules is

required to provide reliable, efficient, and high-quality solar generation capacity. The modules must meet the highest standards of performance, durability, and resistance to local environmental conditions such as high humidity, temperature variations, and hurricane-force winds. These components are essential to ensure optimal energy production, long-term system stability, and consistent performance of the microgrids. The acquisition of photovoltaic modules through this RFQ not only fulfills the immediate requirements of this phase but also supports the continued expansion and resilience of the Cooperative's microgrid program.

3. Quote

3.1. Photovoltaic (PV) Modules

The Cooperativa Hidroeléctrica de la Montaña requires the following photovoltaic (PV) modules:

Good or Service	Description	Quantity
Photovoltaic (PV) Module	Minimum Capacity: 540 Wp Minimum Efficiency: 21%	1,620

3.2. Requirements

Mandatory Requirements

- PV modules must be new.
- PV modules must be UL certified.
- A product warranty must be provided (minimum 15 years).
- Supplier must be in good operational and legal standing.
- Supplier must agree to retain records per 2 CFR §200.334–337 (for 3 years post-payment).

Desired or Optional Features

- Extended product warranty (up to 25 years).
- Bifacial or high-efficiency cell technology.
- Factory-integrated bypass diode.

General

- Technical support and warranty services available in Puerto Rico.
- Delivery within required timelines and capacity to supply the full required volume (1,620 modules)
- Complete technical documentation, including manuals, test certificates, and module datasheets.

Photovoltaic Module

- Minimum rated power output: 540 Wp per module.
- Minimum module efficiency: 21 %.
- Power tolerance: $\pm 3\%$ or as specified in the manufacturer datasheet.
- Module type: Monocrystalline silicon (Mono-Si) preferred.

Installation

- Mechanical load capacity must support wind speeds of at least 170 mph and comply with ASCE 7-16 standards.
- Modules must be designed to withstand pressure differentials caused by strong wind uplift and rapid gusts, maintaining structural integrity under both positive and negative pressure loads.

Certification Compliance & Warranty

- Compliance with applicable standards and certifications: UL 1703 / UL 61730, IEC 61215, IEC 61730, IEC 61701, IEC 62804, IEC 60068-2-68, ISO 9001, ISO 14001, ISO 45001, CEC Listing.
- Minimum product warranty of 15 years.
- Minimum linear performance warranty of 25 years.

3.3. Delivery

Delivery Deadline:	01FEB26
Delivery Location:	Utuaado, Puerto Rico 00641 (precise location to be determined)
Delivery Terms:	Delivered Duty Paid (DDP), inland transport negotiable

Delivery of systems, as negotiated during the procurement process, shall occur in Utuaado, Puerto Rico no later than 01FEB26 to align with the Cooperativa's project

implementation schedule. Installation and commissioning activities are expected to begin shortly thereafter. Suppliers must confirm their ability to meet this delivery date and identify any potential risks or constraints that could affect timely delivery.

3.4. Local Training & Technical Support in Puerto Rico

The Cooperativa Hidroeléctrica de la Montaña and its projects are located in Puerto Rico, therefore the Cooperativa Hidroeléctrica de la Montaña will evaluate the availability of the following in Puerto Rico:

- Technical support
- Training and certification courses on equipment operations and maintenance (O&M)
- Required authorizations for working on equipment, including self-performance.
- Warranty coverage, maintenance schedules to maintain warranty, and estimated O&M costs for that maintenance.

3.5. Applicable Federal Regulations and Compliance Obligations

Build America, Buy America Act (BABA)

The Cooperativa Hidroeléctrica de la Montaña will receive federal funding for this phase of the ReEnFoCo program, therefore equipment must meet certain requirements, such as the Build America, Buy America (BABA) under the Infrastructure Investment and Jobs Act, including OMB Memorandum M-24-02 and Department of Energy guidance and interpretation.

The percentage of the components in the equipment that was manufactured in the United States can be calculated in accordance with the following definition from BABA:

“All manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation. The costs of components of a manufactured product are determined in accordance with 2 CFR 184.5;”

Suppliers must:

- Certify compliance with domestic production preference requirements (BABA).

- Provide documentation of U.S. manufacturing and the percentage of domestic content (minimum 55%, unless DOE/OMB specify another standard).
- Submit manufacturer certifications or cost breakdowns as evidence of compliance.

2 CFR Part 200

Suspension and Debarment (2 CFR §200.214)

- Suppliers must certify that neither the company nor its principals are currently suspended, debarred, proposed for debarment, or declared ineligible for federal contracts.
- The Cooperativa will verify the supplier's status in SAM.gov prior to award.

Conflict of Interest (2 CFR §200.318(c))

Suppliers must certify that:

- There is no actual or potential conflict of interest with the staff, officers, or Board members of the Cooperativa Hidroeléctrica de la Montaña.
- The supplier will disclose any relationship, financial interest, or other circumstances that may represent a conflict.

Bonding Requirements (2 CFR §200.326)

For contracts involving construction or installation exceeding the Simplified Acquisition Threshold (\$250,000):

- Bid Guarantee: 5% of the quote price.
- Performance Bond: 100% of the contract price.
- Payment Bond: 100% of the contract price.
- If not applicable to this RFQ, the Cooperativa will waive the bonding requirements.

Required Federal Contract Clauses (2 CFR §200.327)

The following provisions will apply to any contract issued as a result of this RFQ, as applicable to the scope and funding:

- Equal Employment Opportunity (EO 11246)
- Copeland "Anti-Kickback" Act (40 U.S.C. 3145) (if applicable to construction)
- Davis-Bacon Act (40 U.S.C. 3141–3148) (if construction >\$2,000)
- Contract Work Hours and Safety Standards Act (40 U.S.C. 3701–3708) (if >\$100,000 and applicable to construction/installation)
- Rights to Inventions (37 CFR Part 401) (if applicable)

- Clean Air Act (42 U.S.C. 7401–7671q) and Federal Water Pollution Control Act (33 U.S.C. 1251–1387) (if >\$150,000)
- Suspension and Debarment (2 CFR Part 180)
- Byrd Anti-Lobbying Amendment (31 U.S.C. 1352) (if >\$100,000, supplier must submit certification)
- Domestic production preferences (2 CFR §200.322)

Record Retention and Audit Access (2 CFR §200.334–337)

Suppliers must agree to:

- Maintain all procurement, financial, and performance records for at least three (3) years after final payment.
- Provide access to such records to the Cooperative, the U.S. Department of Energy, the Comptroller General, and auditors upon request.

Federal Funding Disclosure

This procurement is funded in whole or in part with federal funds awarded to the Government of Puerto Rico through the Central Office for Recovery, Reconstruction and Resilience (COR3), as recipient and pass-through entity.

Suppliers must comply with all applicable federal statutes, regulations, and executive orders associated with this award, as well as with the requirements established by DOE, COR3, and the Mountain Hydroelectric Cooperative as a subrecipient of these funds.

3.6. RFQ Response Instructions:

Suppliers interested in bidding on this project are directed to review the Cooperativa Hidroeléctrica de la Montaña's needs (detailed below) and provide a quote to the requester. All questions should be directed to the contact provided in the Requester Information section.

3.7. Response Content Requirements

Suppliers must submit a single PDF file containing the following information and documents, in the order listed below:

Cover Letter

- Brief introduction of the company and confirmation of interest in supplying the required system.
- Authorized representative's name, title, and contact information.

Technical Documentation

- Product datasheet(s) and system specifications.
- Relevant certifications.

Compliance Certifications

- Statement confirming compliance with:
 - Build America, Buy America (BABA) Act
 - Suspension and Debarment (2 CFR §200.214)
 - Conflict of Interest (2 CFR §200.318(c))

Pricing and Delivery

- Unit costs (USD/Wp) for the proposed solutions, including all required components and delivery (Delivered Duty Paid – DDP).
- Estimated delivery lead time and confirmation of ability to meet the required delivery date (01FEB26).

Warranty and Support Information

- Summary of warranty terms (product and performance).
- Description of available technical support and training in Puerto Rico.

Availability for Presentation

- Please provide time alternatives for a potential technical and commercial presentation regarding the submitted quote on the days 22OCT25 – 25OCT25.

Supplier Questionnaire

- Responses to all questions listed under “Supplier Questionnaire.”

4. Supplier Questionnaire

Please respond to the following questions as part of the supplier quote.

1. Are there any recommendations for module cleaning that minimize operator safety risks?
2. What power tolerance is guaranteed (+/- %)?
3. Are the modules monocrystalline, bifacial, or another type?
4. What are the exact weight and dimensions of the module?
5. What is the product warranty (in years)?

6. What is the linear performance warranty (in years and degradation percentage)?
7. What procedures must be followed to maintain the validity of the warranty?
8. What does the warranty cover (labor, replacement, transportation)?
9. Do you have representation or technical support in Puerto Rico or the Caribbean?
10. What is the estimated delivery time when the purchase order is placed?
11. Can you provide updated technical sheets, data sheets, and installation manuals?

5. Selection Process

5.1. Schedule

Milestone	Date
ID	CHM-PVM-001
Issue Date	06OCT25
Supplier Questions Submission Deadline	13OCT25, 17:00 AST
Buyer Questions Response Deadline	15OCT25, 17:00 AST
Supplier Quote Submission Deadline	20OCT25, 23:59 AST
Supplier Presentations by Invitation	22OCT25 — 25OCT25
Equipment Selection Complete	31OCT25

5.2. Supplier Presentations

The Cooperativa Hidroeléctrica de la Montaña reserves the right to invite suppliers who meet the mandatory requirements established in this RFQ to deliver a technical and commercial presentation. These presentations will serve to clarify information, validate the supplier's technical capability, and confirm the compatibility of the proposed equipment with the project's objectives.

Participation in a presentation does not guarantee contract award but will form part of the technical evaluation and final selection process.

5.3. Selection Criteria

Mandatory Requirements

Quotes that do not meet all mandatory requirements specified in this RFQ will be automatically disqualified and will not be considered for technical or financial evaluation.

Weighted Criteria

Weighted criteria will be evaluated based upon:

Criteria	Points
Technical Performance	30
Cost	25
Warranty	15
Support & Availability	15
Compliance	15
Total	100

6. Administrative and Legal Conditions

6.1. Quote Validity Period

All submitted quotes must remain valid for 60 days from the RFQ Due Date.

6.2. Invoicing Instructions

Suppliers will be requested to provide a list of accepted payment methods.

6.3. Submission Format

Responses must be submitted via email to the email address indicated in the Requester Information section as a single PDF attachment.

6.4. Selection Disclaimer

The Cooperativa Hidroeléctrica de la Montaña reserves the right to reject any or all quotes and is not obligated to award a contract based solely on the lowest cost.

7. Conclusion

Please send all questions related to this request for quotation to microrred@cooperativahidroelectrica.coop.

The Cooperativa Hidroeléctrica de la Montaña reaffirms its commitment to transparency, quality, and community energy resilience through a structured and competitive procurement process. Interested vendors must ensure full compliance with all requirements outlined in this RFQ and submit complete, verifiable quotes consistent with applicable technical and regulatory standards. Submission of a quote does not guarantee contract award; all quotes will be evaluated based on technical merit, cost-effectiveness, and compliance. Through this process, the Cooperative seeks to identify strategic partners that will strengthen the energy infrastructure and resilience of communities across Puerto Rico's Central Mountain Range.

8. Appendix: Revisions

Revision	Changes
Rev 1	Initial document
Rev 2	Formatting changes
Rev 3	Section 2.3 was updated to only describe the procurement of photovoltaic modules. Originally it contained mentions of mounting system.
Rev 4	Appendix with a table of document revisions added.