

Request for Quote (RFQ): All-in-One Inverter & Battery Energy Storage System (BESS)

1. Executive Summary

The Cooperativa Hidroeléctrica de la Montaña is issuing this Request for Quote (RFQ) CHM-AOIBESS-001 for the procurement of All-in-One Inverter and Battery Energy Storage Systems (BESS) 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 equipment must integrate inverter and storage functions into a single, reliable system that complies with the Build America, Buy America (BABA) Act, LUMA Energy interconnection standards, and all applicable UL, IEC, and ISO certifications.

The objective of this RFQ is to identify qualified suppliers capable of providing technically compliant, high-performance, and durable All-in-One BESS units that ensure system safety, cybersecurity, scalability, and long-term reliability under Puerto Rico's operating conditions. Selected suppliers will be evaluated based on technical performance, cost competitiveness, warranty coverage, local support availability, and regulatory compliance. Initial delivery is expected no later than 01FEB25 in Utuado, Puerto Rico, with full documentation, warranty, and training support required. Through this procurement, the Cooperativa aims to strengthen community energy resilience, advance its distributed renewable energy model, and lay the foundation for future expansion of microgrids across the island's 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 +1.939.300.4377, 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 and 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 mounting systems is required to safely and efficiently support the photovoltaic modules, meeting the highest standards of quality, durability, and resistance to local environmental conditions. These systems are necessary to ensure the correct installation and alignment of the modules, maximize renewable energy production, and guarantee the long-term stability and reliability of the systems. The acquisition of mounting systems through this RFQ not only addresses the immediate needs of this phase but also lays the foundation for the future expansion of the Cooperative's microgrid program.

3. Quote

3.1. All-in-One Inverter & Battery Energy Storage System (BESS)

The Cooperativa Hidroeléctrica de la Montaña requires the following all-in-one inverter and battery energy storage system specifications:

Item	Description	Quantity
All-in-One Inverter & Battery Energy Storage System (BESS)	Inverter PV Input Capacity: 10 – 40 kW BESS Capacity: 18 – 80 kWh	Up to 120 depending on unit capacity

3.2. Requirements

Mandatory Requirements

- The system must be integrated and not represent the union of separate individual equipment that is not integrated.
- Equipment must be UL certified
- A product warranty must be provided (minimum of 10 years).
- Approved for interconnection with the Puerto Rico electric power system
- Supplier must be in good 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 (20 years)

- Extended warranty coverages (Temperature, Humidity)
- Auxiliary load metering and reporting

General

- Available technical support, maintenance, and training in Puerto Rico
- Delivery within required timelines and capacity to supply total required volume
- Reliable remote monitoring and control via WiFi or cellular connection

Battery Energy Storage

- Usable energy storage capacity within SoC limit: 18 kWh to 80 kWh per unit
- Scalable with option to connect multiple units in parallel to meet specific microgrid needs
- Removable battery modules for easy transport and servicing
- Battery chemistry: lithium iron phosphate (LFP/LiFePO₄) preferred, other chemistries considered
- Protections: short circuit, over current, overcharge, over temperature, cell over voltage, cell under voltage, cell discharge
- Performance data metering and recording every 15 minutes

Hybrid/Bidirectional Inverter (Inverter + Rectifier)

- Aggregate PV input power per unit: 8 kW – 30 kW
- Nominal AC output power per unit: 8 kW – 25 kW

Enclosure & Installation

- Outdoor-rated enclosure with IP55 rating or similar
- Floor-mounted, free-standing installation style

Certification Compliance & Warranty

- Approved for interconnection with the Puerto Rico electric power system
 - Must be certified by the Permits Management Office (OGPe) of the Puerto Rico Department of Economic Development and Commerce. Certification or process status must be provided.
 - Must be included in LUMA Energy's "Approved Inverters" list, accessible at the following link: <https://prep-luma.lumapr.com/prepaGD/inverterModelDetails/list>

- Compliance with applicable standards and certifications: UL 1642, UL 1741, UL 1973, UL 9540, IEC 62619, IEC 61000, ISO 9001, ISO 14001, ISO 45001
- Cybersecurity protection and management according to applicable standards (e.g., NIST, IEEE 1547-2018, DOE guidelines)
- 10-year warranty minimum for product and system performance

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 resulting from 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 Cooperativa, 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 responding to this RFQ are directed to review the product requirements, as presented in Section 2.2, and provide a quote to the Cooperativa Hidroeléctrica de la Montaña herein referred to as the "Requester". All questions should be directed to the contact provided in the Requester Information section by the Supplier Questions Submission Deadline detailed in the above table.

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 Proposal

- Product datasheet(s) and system specifications.
- Relevant certifications (for example, UL 9540, UL 1973, UL 1642, IEC 62619).

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/kW and USD/kWh) 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 response:

1. Does the proposed system comply with the Build America, Buy America (BABA) Act, and what is the percentage of domestic content?
2. Is the proposed system approved by LUMA Energy and certified by the Public Energy Policy Program of the Puerto Rico Department of Economic Development and Commerce for interconnection with the Puerto Rico electric power system?
3. Can you provide product datasheets, system architecture diagrams, and all relevant certification and test documents (e.g., UL 9540, UL 9540A, UL 1973, UL 1642, IEC 62619)?
4. What warranty terms are offered (product, performance, and software), and can you provide a sample warranty agreement?
5. Can you provide references for prior installations of similar systems in Puerto Rico or the Caribbean region?
6. What are the expected delivery lead times for the proposed systems from purchase order to commissioning?

7. What are the operation and maintenance (O&M) requirements for your system, and what are the estimated O&M costs over a 10-year period?
8. Is the system compatible with third-party Energy Management Systems (EMS) or SCADA platforms? What system operations (e.g., charge/discharge control, status monitoring, firmware updates) can be managed remotely without requiring a site visit?
9. What cybersecurity standards or frameworks does your system follow (e.g., NIST, IEEE 1547-2018, DOE guidelines)?
10. What training and technical support are available locally or regionally for installation, configuration, and maintenance?

5. Selection Process

5.1. Schedule

Milestone	Date
ID	CHM-AOIBESS-001
Issue Date	06OCT25
Supplier Questions Submission Deadline	13OCT25, 17:00 AST
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 Method and 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 document and submit complete, verifiable quotes consistent with applicable technical and regulatory standards. Submission of a quote does not guarantee contract award; all proposals 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.