MINUTES OF PRE-BID MEETING

"DESIGN, SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND 3-YEAR OPERATIONS & MAINTENANCE OF FOUR (4) GRID-SCALE BATTERY ENERGY STORAGE SYSTEMS"

Project: Belize Reliant and Resilient Energy Systems (BRRES) Project
RFB No.: BZ-MFEDI-CEU-539302-CW-RFB
Employer: Government of Belize, represented by the Central Executing Unit, Ministry of Finance
Date: October 21, 2026
Time: 9:30 a.m., Belize Time
Location: Virtual Meeting via Microsoft Teams

Agenda:

- Ground rules of the Pre-Bid Meeting
- The BRRES Project and BESS objectives
- Procurement at a glance and key dates
- Parties and roles
- Introduction to the four BESS sites
- Scope of works and key technical requirements
- Logistics to the sites, including San Pedro
- Rated criteria and bid evaluation
- Addendum No. 1 - key changes
- Questions and answers

OPENING REMARKS

The meeting was opened by the Central Executing Unit. Participants were welcomed to the Pre-Bid Meeting for the procurement of the design, supply, installation, testing, commissioning, and three-year operations and maintenance of four grid-scale Battery Energy Storage Systems under the BRRES Project.

Participants were informed that the minutes of the Pre-Bid Meeting, together with the presentation, would be shared with the bidders and made available through the Ministry of Finance procurement webpage.

The Owner's Engineer explained that the purpose of the presentation was to provide an overview of the procurement, including the project background, scope, technical requirements, site logistics, rated criteria, bid evaluation process, upcoming clarifications, and the anticipated addendum.

PURPOSE OF THE PRE-BID MEETING

The purpose of the Pre-Bid Meeting was to clarify issues and address questions relating to the bidding

document at the current stage of the procurement, consistent with ITB 7.4.

The RFB states that the purpose of a Pre-Bid Meeting is to clarify issues and answer questions on matters that may be raised at that stage. The RFB further provides that questions should be submitted in writing no later than one week before the meeting.

GROUND RULES
The following ground rules were presented and explained:

- **Information Presented During the Meeting**
  The presentation and discussions were for information and clarification purposes. They summarized the bidding document but did not modify or supersede it. In the event of any discrepancy, the issued bidding document, formal clarifications, and addenda would prevail.

- **Amendments to the Bidding Document**
  Any modification to the bidding document arising from the Pre-Bid Meeting would be made exclusively through a formal addendum issued pursuant to ITB 8 and not through the meeting minutes or presentation.

- **Submission of Questions**
  Questions raised during the meeting requiring a formal response were to be submitted in writing through the official procurement clarification channel. Participants were instructed to provide clear references to the relevant clauses, drawings, layouts, or technical documents so that the questions could be properly reviewed and formally answered. It was mentioned to the participants that as per ITB 7 Clarification of Bidding Document, Site Visit, Pre-Bid Meeting , 7.5 The Bidder is requested to submit any questions in writing, to reach the Employer not later than one week before the meeting, however no specific question to the pre bid meeting were received.

- **Equal Treatment of Bidders**
  Questions would be circulated without identifying their source. Formal responses would be shared with all bidders that had obtained the bidding document and published on the Ministry of Finance procurement webpage, as applicable.

- **Attendance**
  Non-attendance at the Pre-Bid Meeting or site visits would not constitute grounds for disqualification. However, participation in the site visits was strongly encouraged to allow bidders to verify site conditions and logistics.

- **Official Communication**
  Bidders were reminded not to contact CEU, Belize Electricity Limited, or the Owner's Engineer regarding the procurement outside the official clarification channel.

DISCUSSION SUMMARY
- **BRRES Project and BESS Objectives**
  The proposed procurement covers four BESS facilities with a combined power rating of **45.1 MW**

and combined usable energy of **180.4 MWh**. The systems are to operate primarily in grid-forming mode while also supporting grid-following functionality. The black-start and transition to stable island operation requirement is five minutes or less.

The BESS facilities are intended to:

- improve national grid resilience;
- support system restoration and black-start functions;
- provide independent voltage references at the four sites;
- facilitate greater renewable-energy integration;
- shift available midday energy to meet evening peak demand;
- support the San Pedro island grid;
- defer network reinforcement; and
- improve power quality.

- **Procurement at a Glance**

The procurement was described as an international competitive Request for Bids for Plant Design, Supply and Installation, governed by World Bank Procurement Regulations.
The following key procurement arrangements were highlighted:

- A two-envelope bidding process will apply, with the Technical Part and Financial Part submitted in separate sealed envelopes.
- The Most Advantageous Bid will be determined using rated criteria.
- The Technical Part carries a weighting of 65 percent and the Financial Part carries a weighting of 35 percent.
- The successful contractor will have single responsibility for the design, supply, installation, testing, and commissioning of the four sites.
- The contract is based on a fixed-price arrangement.
- Plant is to be delivered on a CIP named-place-of-destination basis in accordance with Incoterms 2020.
- A separate firm fixed-price proposal for the three-year O&M arrangement is to be included in the Financial Part.
- Alternative bids and alternative technical solutions are not permitted.
- A Bid-Securing Declaration is required.
- Bids must be submitted physically. Electronic bid submission is not permitted.

The RFB confirms that the bid comprises separate Technical and Financial Parts and that price information must not be included in the Technical Part. Material price information in the Technical Part would result in the bid being declared non-responsive.

- **Key Dates and Site-Visit Schedule**

The following dates were presented during the meeting:

- **October 21, 2026:** Virtual Pre-Bid Meeting (9:30 a.m.)
- **October 21, 2026 at 1:30 p.m.:** San Pedro site visit
- **October 22, 2026 at 9:00 a.m.:** Dangriga site visit
- **October 22, 2026 at 11:00 a.m.:** Westlake site visit
- **October 22, 2026 at 2:30 p.m.:** Buena Vista site visit

- **November 8, 2026:** Proposed revised deadline for clarification requests
- **November 12, 2026:** Target date for issuance of responses and the associated addendum
- **November 23, 2026 at 3:00 p.m.:** Bid submission deadline
- **November 23, 2026 at 3:30 p.m.:** Opening of Technical Parts

Participants were advised that the proposed changes to the clarification timeline would be formally confirmed through an addendum. The bid submission deadline remained unchanged at the time of the meeting.

PARTIES AND ROLES

The following institutional roles were outlined:

- **Central Executing Unit, Ministry of Finance**
  The Central Executing Unit represents the Government of Belize as Employer and is responsible for the tender process, contract award, and overall contract administration.

- **World Bank**
  World Bank is the financier of the main design, supply, installation, testing, and commissioning contract.

- **Belize Electricity Limited**
  Belize Electricity Limited is the national utility, system operator, and intended asset owner. BEL will also be the employer for the separately funded three-year O&M contract and will be responsible for grid-interface approvals.

- **GOPA Tech GmbH**
  GOPA Tech GmbH serves as the Owner's Engineer and supports CEU as the Project Manager, including design review, quality assurance and quality control, witnessing of testing, payment certification, and environmental, social, health and safety oversight.

- **EPC Contractor**
  The EPC contractor will report to the Project Manager. All activities undertaken within BEL premises must be coordinated with BEL.

OVERVIEW OF THE FOUR BESS SITES

1. **Westlake, Belize District**
   - Capacity: 10.8 MW / 43.2 MWh
   - Point of interconnection: 22 kV
   - Approximate BESS plot: 0.29 acre
   - Approximate distance from substation: 150 feet
   - Access: George Price Highway
   - Key considerations: operating brownfield site, high water table, flooding risk, elevated-platform and drainage requirements, and proximity to an existing 30 MW diesel generation unit and associated fuel-handling facilities.

2. **Dangriga, Stann Creek District**
   - Capacity: 10.8 MW / 43.2 MWh
   - Point of interconnection: 22 kV
   - Approximate BESS plot: 0.28 acre
   - Approximate distance from substation: 120 feet
   - Key considerations: coastal exposure, hurricane risk, elevated-platform requirements, vegetation clearing and grubbing, weaker southern network conditions, and coordination with BEL for protection and power quality.

3. **Buena Vista, Corozal District**
   - Capacity: 10.8 MW / 43.2 MWh
   - Point of interconnection: 34.5 kV
   - Approximate BESS plot: 0.45 acre
   - Approximate distance from substation: 150 feet
   - Key considerations: hurricane winds, localized flooding, vegetation clearing, nearby residential properties, noise and community health and safety considerations, and protection coordination associated with the northern network and the Mexico interconnection.

4. **San Pedro, Ambergris Caye**
   - Capacity: 12.7 MW / 50.8 MWh
   - Point of interconnection: 34.5 kV
   - Approximate BESS plot: 0.40 acre
   - Approximate distance from substation: 150 feet
   - Key considerations: island logistics, hurricane and storm-surge exposure, marine corrosion, proximity to the Iguana Sanctuary and fuel station, horizontal directional drilling for the 34.5 kV and control cables, and the BESS role in island-grid restoration and submarine-cable re-energization.

   All bidders were reminded that the site information provided was for information purposes and that bidders were responsible for verifying site data through their own site visits, surveys, and investigations.

SCOPE OF WORKS

The scope was described as a full turnkey responsibility for each site, including:

Engineering and Surveys

- topographic surveys;
- geotechnical investigations;
- storm-surge and flood modelling;
- civil, structural, electrical, protection, SCADA, fire, and thermal design; and
- obtaining applicable permits and approvals.

Supply and Installation

- LFP battery energy storage systems;

- battery management systems;
- power conversion systems;
- energy management systems;
- medium-voltage switchgear;
- step-up transformers;
- metering and earthing systems;
- elevated platforms;
- hurricane hardening;
- roads, fencing, lighting, and drainage;
- medium-voltage cable connections to BEL substations; and (up to the point of interconnection at the BEL incoming feeder bay; works within the BEL substations remain BEL's responsibility)
- horizontal directional drilling at San Pedro.

Testing and Handover

- factory acceptance testing;
- site acceptance testing;
- capacity and round-trip efficiency testing;
- grid-forming and black-start testing;
- reliability testing;
- SCADA integration;
- training;
- O&M manuals;
- as-built drawings;
- digital-twin requirements; and
- capacity-warranty obligations.

Key Technical and Performance Requirements

The key technical requirements highlighted during the meeting included:

- grid-forming operation as the primary operating mode at all sites;
- grid-following capability;
- seamless transition between grid-forming and grid-following modes;
- synthetic-inertia capability;
- black start and stable island operation within five minutes;
- active and reactive power response requirements;
- round-trip efficiency requirements at the point of interconnection;
- usable-energy requirements at beginning of life;
- availability requirements;
- LFP battery chemistry;
- battery-retention requirements;
- fire-safety compliance;
- hurricane, flooding, storm-surge, and corrosion protection;
- SCADA and cybersecurity compliance; and
- compliance with the Belize Grid Code.

The issued Belize Grid Code identifies battery energy storage systems as power park modules and establishes requirements covering frequency response, voltage capability, grid-forming operation, compliance studies, testing, simulations, and technical-information submissions.

SITE LOGISTICS

- **Mainland Sites**
  The Ports of Belize and Big Creek were identified as potential ports of entry. Bidders were advised to account for:
    - delivery to each site;
    - dangerous-goods Class 9 handling, labeling, and documentation;
    - ongoing road and bridge works;
    - flood-prone highway sections; and
    - heavy-haul and oversized-load permits

- **San Pedro**
  The Southern Barge Terminal was identified as the applicable landing point. Participants were advised to consider:
    - shallow channel draft;
    - barge point-load requirements;
    - limited crane capacity on the island;
    - narrow streets and tight turning conditions;
    - escort requirements;
    - transportation windows;
    - the possible use of smaller containerized BESS units;
    - limited ground-bearing capacity;
    - traffic-management requirements; and
    - Town Council approvals.

RATED CRITERIA AND EVALUATION PROCESS

Participants were informed that the contract would be awarded to the bidder presenting the Most Advantageous Bid based on a combined technical and financial evaluation. The lowest-priced bid would not automatically be selected.

The weighting is:

- **Technical Part:** 65 percent
- **Financial Part:** 35 percent

The evaluation process was outlined as follows:

1. Opening of the Technical Parts.
2. Review of responsiveness, including required documents, the Bid-Securing Declaration, and confirmation that the Technical Part contains no price information.
3. Assessment of eligibility and qualification requirements.
4. Detailed technical evaluation using a scoring scale from zero to four.
5. Opening of the Financial Parts of technically responsive bidders.
6. Evaluation of the bid price, life-cycle costs, and applicable functional-guarantee adjustments.

7. Calculation of the combined technical and financial score.
8. Identification of the Most Advantageous Bid.
9. Notification of Intention to Award, standstill period, and subsequent award and contract-signing procedures.

The principal rated-criteria categories presented were:

- grid-forming and black-start capability;
- guarantees and battery life;
- technical solution and design; and
- environmental, social, health and safety arrangements.

Addendum and Clarifications Under Preparation

Participants were advised that Clarifications Nos. 1, 2, and 3 had already been issued. Clarification No. 4 and Addendum No. 1 were under preparation.

The proposed addendum was expected to provide further clarification on:

- the clarification timetable;
- geotechnical-investigation requirements;
- Grid Code compliance studies and testing;
- information and documentation requirements; and
- earthing design.

It was emphasized that the formal addendum, once issued, would govern any indicative information presented during the meeting.

QUESTIONS AND RESPONSES

Question 1: Available Site Boundaries

A participant requested confirmation on whether the site areas shown for the four locations represented the final available boundaries. The participant also asked whether changes to fences, gates, equipment arrangements, or site boundaries would be permitted if the required capacity could not be accommodated while satisfying NFPA 855 separation, fire-access, and independent equipment-replacement requirements.

Response

The participant was requested to submit the question formally in writing. It was stated generally during the meeting that the site boundaries had been established and that its EPC's responsibility. BEL has proposed an alternative plot at Dangriga, and the usable area observed at Westlake (~8,000 sq ft) is smaller than in Appendix B (0.29 acre). Any formal or detailed response would be issued through the clarification process. The site areas shown in Appendix B are indicative; the final site boundaries will be confirmed through the clarification and addendum process.

Question 2: Black-Start and Islanded-Operation Scope

A participant requested clarification on the network scope and load composition applicable to black-start and islanded operation at each site, including the relevant buses, transformers, feeders, rated load, full-load-step conditions, staged load restoration, and load-shedding arrangements.

Response

The question was identified as requiring detailed technical review. The participant was requested to submit it formally in writing so that it could be analyzed and answered through the official clarification process.

Question 3: Seamless-Transition Requirement
A participant asked whether the seamless-transition requirement of 50 milliseconds or less applied only to transition between PCS control modes or also included operation of the circuit breaker used to isolate the intended island from the utility grid. Clarification was also requested on the applicable starting point for measuring the 50-millisecond period.
Response
The participant was requested to submit the question formally in writing for technical review and issuance of an official response.

Question 4: Common Equipment Bill of Quantities
A participant noted that the bidding document did not contain a common equipment Bill of Quantities and requested confirmation on whether the Employer would issue one. If no common BOQ would be issued, confirmation was requested that equipment types, quantities, and unit ratings would be determined by the bidder based on the performance requirements and site constraints.
Response
The participant was requested to submit the question formally in writing so that it could be reviewed and answered through the official clarification process.

Question 5: Access to Previously Issued Clarifications
A participant advised that Clarification No. 1 had not been received and requested that it be reissued.
Response
The Employer confirmed that previously issued clarifications could be shared again. Participants were also advised that the three clarifications already issued were available for download from the Ministry of Finance procurement webpage.

Question 6: Import Duties and Taxes
A question was raised through the meeting chat regarding responsibility for import duties and taxes.
Response
Participants were advised that the matter had already been addressed in a previously issued clarification. Participants were asked to review the clarifications available through the Ministry of Finance procurement webpage to ensure consistency with the formal response already issued.

Question 7: Cost of Site Visits
A participant asked who would be responsible for paying the costs associated with attending the site visits.
Response
It was confirmed that prospective bidders were responsible for their own site-visit costs. The RFB states that the bidder is advised to visit and examine the site and that the costs of visiting the site are at the bidder's own expense.

Question 8: Circulation of Site-Visit Reports

A participant asked whether the records or reports of the site visits would be issued to all bidders.

Response

The Employer confirmed its intention to document the site visits. The site-visit minutes would be shared with bidders and published on the Ministry of Finance procurement webpage for accessibility.

DISTRIBUTION OF MINUTES AND PROCUREMENT DOCUMENTS

It was explained that the minutes, presentation, clarifications, and site-visit records would be issued to the contact address used by each company to register for or obtain the bidding document.

Participants who required direct receipt of procurement communications were advised to ensure that their relevant email addresses were registered through the bid-document registration process.

SITE-VISIT ARRANGEMENTS

The San Pedro site visit was confirmed for **1:30 p.m. Belize Time on October 21, 2026**, having been brought forward from the previously scheduled time.

Participants were to convene at the coordinates provided in the bidding document. The visit would include:

- inspection of the proposed BESS site;
- external viewing of the nearby BEL substation, without entering the property, for safety reasons; and
- a drive through San Pedro from the proposed site to the identified port to allow bidders to assess the relevant logistical conditions and constraints.

AGREED ACTION ITEMS

No.	Action item	Responsible party
1	Submit all technical questions raised during the Pre-Bid Meeting in writing through the official clarification channel, with references to the relevant bidding-document provisions and drawings.	Prospective bidders
2	Review and formally respond to written clarification requests in accordance with the bidding procedure.	CEU, with input from BEL and the Owner's Engineer
3	Reissue previously issued clarifications where necessary and maintain their availability through the Ministry of Finance procurement webpage.	CEU
4	Finalize and issue Clarification No. 4.	CEU, BEL and Owner's Engineer
5	Finalize and issue Addendum No. 1, including applicable changes concerning the clarification timetable, geotechnical scope, Grid Code compliance, and earthing design.	CEU, BEL and Owner's Engineer

6	Prepare and circulate the minutes of the Pre-Bid Meeting together with the presentation.	CEU
7	Prepare and circulate the records of the San Pedro, Dangriga, Westlake, and Buena Vista site visits.	CEU, with support from BEL and the Owner's Engineer
8	Publish the meeting minutes, presentation, site-visit records, clarifications, and addendum through the applicable Ministry of Finance procurement webpage.	CEU
9	Verify site conditions, dimensions, access routes, logistics, and other site data through bidders' own surveys and investigations.	Prospective bidders
10	Ensure that the Technical Part contains no price information and that the separate O&M pricing is included in the Financial Part as required by the bidding document.	Prospective bidders

The above actions reflect the formal submission, response, publication, and site-verification arrangements discussed during the meeting.

CLOSING
No further questions were raised.

The Owner's Engineer and Central Executing Unit thanked the participants, Belize Electricity Limited, World Bank, and the prospective bidders for attending and contributing to the meeting.

Participants were reminded of the revised start time for the San Pedro site visit and the scheduled visits to the remaining three sites on October 22, 2026. The meeting was thereafter closed.

ANNEX I - Prebid Meeting Presentation

Virtual Pre-Bid Meeting · 21 October 2026, 9:30 a.m. (Belize time)

Central Executing Unit, Ministry of Finance · BEL · Owner's Engineer: GOPA Tech GmbH

GOPA Tech

Pre-Bid Meeting – Four (4) Grid-Scale Battery Energy Storage Systems

BRRES Project

RFB BZ-MFEDI-CEU-539302-CW-RFB

Design, Supply, Installation, Testing, Commissioning & 3-Year O&M

Shaping
a better tomorrow

Agenda

GOPA

01 Ground Rules of the pre-bid meeting

02 The BRRES Project and BESS objectives

03 Procurement at a glance and key dates

04 Parties and roles

05 Introduction to the four sites

06 Scope of works and key technical requirements

07 Logistics to site, including San Pedro

08 Rated criteria and bid evaluation

09 Addendum No. 1 – key changes and BEL works

10 Questions and answers

Ground Rules of This Pre-Bid Meeting

GOPA

1. **Information only**

   This presentation summarises the bidding document. In case of any difference, the bidding document and its Addenda prevail.

2. **Addenda are binding**

   Any modification will be made exclusively by formal Addendum under ITB 8 – not through the minutes or this presentation (ITB 7.4).

3. **Questions in writing**

   Questions raised today must also be submitted in writing to procurement@ceu.mof.gov.bz to receive a formal response.

4. **Equal treatment**

   Minutes, questions (without source) and responses will be shared with all Bidders who obtained the bidding document.

5. **Attendance**

   Non-attendance at the pre-bid meeting or site visits is not a cause for disqualification; site visits are strongly encouraged.

6. **No contact**

   Bidders shall not contact CEU, BEL or the Owner's Engineer on the tender other than through the official clarification channel.

The BRRES Project and the BESS Objectives

45.1 MW
total BESS power at 4 sites

180.4 MWh
usable energy (4-hour duration)

GFM + GFL
grid-forming / following at all sites

≤ 5 min
black-start to stable island operation

Why BESS for Belize

- **Grid resilience:** arrest frequency collapse after loss of the largest infeed (Mexico/CFE import up to 55 MW) and avoid load shedding.
- **Black start & restoration:** independent voltage reference at all four sites to restart the grid after hurricanes – four-island restoration strategy.
- **Renewable integration:** enable ~135 MW of planned solar PV by shifting mid-day energy to the evening peak.
- **San Pedro:** support the island grid at the end of the submarine cable, defer reinforcement and improve power quality.

Financed by the **World Bank** (BRRES Project) through the Government of Belize. The **3-year O&M** forms part of the scope but is priced and contracted **separately with BEL**.

Procurement at a Glance

GOPA

Item	Requirement (RFB, BDS)
Method	International competitive RFB – Plant Design, Supply & Installation (WB Procurement Regulations, Sept 2023)
Envelopes	Two-envelope process: Technical Part and Financial Part in separate sealed envelopes
Evaluation	Most Advantageous Bid with Rated Criteria: Technical **65%** / Price **35%** (ITB 32.2)
Responsibility	Single responsibility for design, supply, installation, testing and commissioning of all four sites
Price basis	Fixed price; Plant on CIP named place of destination (each Site), Incoterms 2020
O&M	Separate firm fixed-price proposal for 3-year O&M (locally-funded contract) in Financial Part
Alternatives	Alternative bids and technical alternatives not permitted
Bid security	Bid-Securing Declaration
Bid validity	Until 23 March 2027
Submission	**Physical only** – 3rd Floor, South Wing, Sir Edney Cain Building, Belmopan (no electronic bids)

ADDENDUM No. 1 (to be issued)

Key Dates – Revised Clarification Timeline

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1

21 Oct 2026

Pre-bid meeting (virtual) and San Pedro site visit

2

22 Oct 2026

Site visits: Dangriga, Westlake, Buena Vista

3

08 Nov 2026

LAST DAY for requests for clarification

4

12 Nov 2026

All responses issued (with Addendum No. 1)

5

23 Nov 2026

Bid submission deadline 3:00 p.m. – opening 3:30 p.m.

- The clarification deadline is brought forward from “10 days before bid submission” (BDS ITB 7.1) to **15 days**, so that all responses and Addendum No. 1 are available by **12 November 2026** – 11 days before submission.
- Site visits: San Pedro 21 Oct 1:30 p.m.; Dangriga 22 Oct 9:00 a.m.; Westlake 11:00 a.m.; Buena Vista 2:30 p.m. Transport and logistics at Bidder’s own cost.

Parties and Roles

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Government of Belize – CEU, Ministry of Finance

Employer; tender process, contract award and administration

World Bank

Financier of the DSITC contract; Procurement Regulations and ESF apply

Belize Electricity Ltd. (BEL)

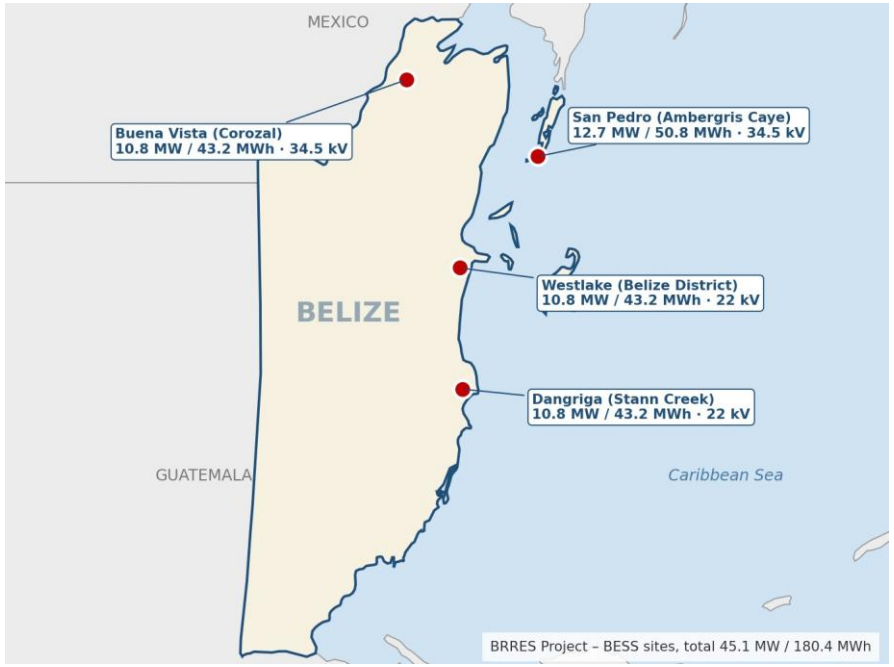
Utility, system operator and asset owner; employer of the separate 3-year O&M contract; grid interface approvals

Owner's Engineer – GOPA Tech GmbH

Supports CEU as Project Manager: design review, QA/QC, testing witness, payment certification, ESHS oversight

The EPC Contractor reports to the Project Manager; all works inside BEL substations are coordinated with BEL (outages, permits-to-work, protection settings, energisation).

Four Sites – Overview



Site	MW / MWh	POI	Plot (App. B)	Key constraint
Westlake, Belize District	10.8 / 43.2	22 kV	~0.29 acre	High water table, flooding; 30 MW diesel GT ~400 ft south
Dangriga, Stann Creek	10.8 / 43.2	22 kV	~0.28 acre	Coastal, high hurricane exposure; vegetation removal
Buena Vista, Corozal	10.8 / 43.2	34.5 kV	~0.45 acre	Hurricane winds, localized flooding; vegetation removal
San Pedro, Ambergris Caye	12.7 / 50.8	34.5 kV	~0.40 acre	Island: surge, C5-M corrosion; Iguana Sanctuary (W), fuel station (S); barge only

- All sites are adjacent to existing BEL substations (~120–150 ft).
- Bidders must verify all site data through their own site visits, surveys and investigations (Appendix B).

Site Introduction – Westlake – Belize District – Info Purpose only



Appendix B satellite image; red outline = substation (green) / BESS plot (purple)

Site facts

- 10.8 MW / 43.2 MWh · POI 22 kV
- 17.467768, -88.295710
- BESS plot ~0.29 acre, ~150 ft from substation
- Access: George Price Highway (~10 mi from Port of Belize)

Key considerations for Bidders

- Brownfield site within an operating BEL generation and substation compound – work under BEL site rules and permits-to-work
- Low-lying coastal plain, high water table: elevated platforms and drainage design are key
- 30 MW diesel GT and fuel handling ~400 ft south: NFPA 855 / fire separation and interface with GT operations
- Black-start role: BESS to support cranking of the Westlake GT
- Road works on George Price Highway (Belize City–Hattieville)

Site Introduction – Dangriga – Stann Creek District - Info Purpose only



Appendix B satellite image; red outline = substation (green) / BESS plot (purple)

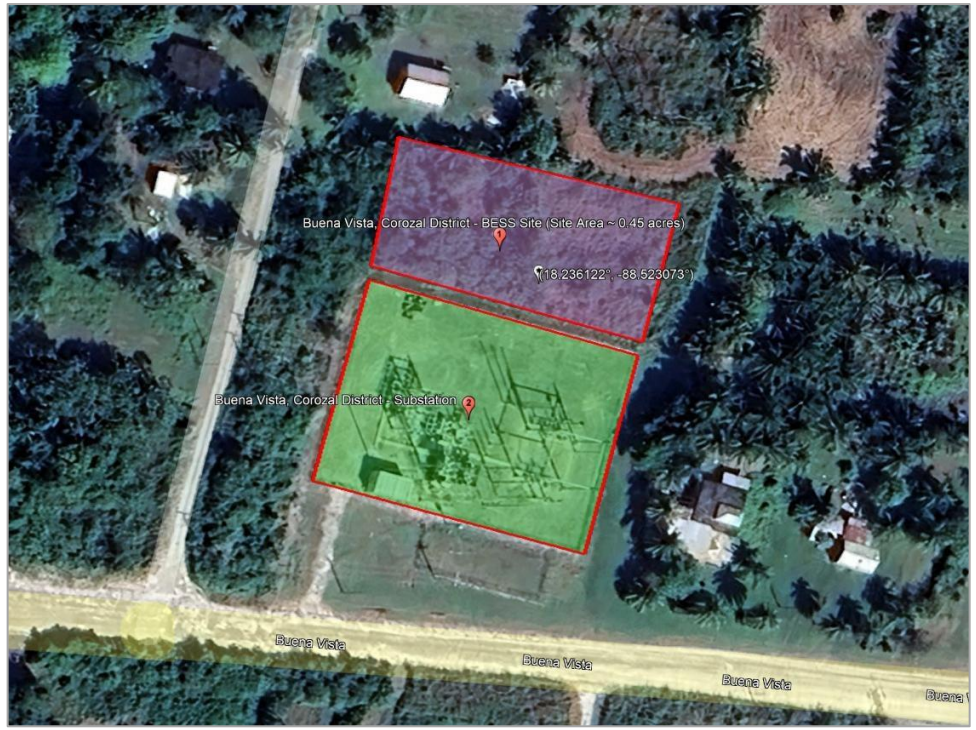
Site facts

- 10.8 MW / 43.2 MWh · POI 22 kV
- 16.972490, -88.284910 (Sarawee)
- BESS plot ~0.28 acre, ~120 ft from substation
- Access: Hummingbird Highway (~46 mi from Port of Big Creek)

Key considerations for Bidders

- Coastal location with significant hurricane exposure; elevated platform required
- Plot requires vegetation clearing and grubbing (Forestry permit if required)
- Southern region anchor for restoration – grid-forming with local diesel/hydro
- Weaker southern network: protection and power-quality coordination with BEL
- Road works on Thomas Vincent Ramos Highway; Coastal Plain Highway flood-prone Jun–Nov

Site Introduction – Buena Vista – Corozal District - Info Purpose only



Appendix B satellite image; red outline = substation (green) / BESS plot (purple)

Site facts

- 10.8 MW / 43.2 MWh · POI 34.5 kV
- 18.236122, -88.523073
- BESS plot ~0.45 acre, ~150 ft from substation
- Access: Philip Goldson Highway (~70 mi from Port of Belize)

Key considerations for Bidders

- Inland, but subject to hurricane winds and localized flooding
- Plot requires vegetation clearing; residential neighbours to the east – noise and community H&S
- Northern region anchor: grid-forming reference for solar PV after outages
- Close to the CFE (Mexico) interconnection – protection coordination at 34.5 kV
- Road works on Philip Goldson Highway (Ladyville–Gardenia)

Site Introduction – San Pedro – Ambergris Caye - Info Purpose only



Appendix B satellite image; red outline = substation (green) / BESS plot (purple)

Site facts

- 12.7 MW / 50.8 MWh · POI 34.5 kV
- 17.922359, -87.962046
- BESS plot ~0.40 acre, ~150 ft from substation (across town street)
- Barge landing: Southern Barge Terminal only

Key considerations for Bidders

- Highest hurricane, storm-surge and C5-M marine corrosion exposure – site-specific surge modelling required
- Iguana Sanctuary directly west (biodiversity, ESS6) and fuel station directly south (fire / explosion separation)
- 34.5 kV and control cables by HDD under the town street (min. 5 ft cover, 2 spare ducts)
- Island grid at end of submarine cable: black-start and cable re-energisation role

Scope of Works – Full Turnkey per Site

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1 Engineering & surveys

- Topographic survey, geotechnical investigation, storm-surge / flood modelling
- Detailed design: civil, structural, electrical, protection, SCADA, fire, thermal
- Permits: DOE, Fire Service, CBA, Forestry, Town Council, Port Authority, BEL

2 Supply & installation

- LFP BESS, BMS, PCS, EMS, MV switchgear, step-up transformers, metering, earthing
- Elevated platforms, Cat. 5 hurricane hardening, roads, fencing, lighting, drainage
- MV cables to BEL substation; HDD at San Pedro

3 Testing & handover

- FAT, SAT, capacity & RTE (3 cycles), grid-forming / black-start, 168-h reliability run
- PRISM 12 SCADA integration (DNP3 / IEC 61850), IEC 62443 SL-3
- Training 80 h/site, O&M manuals, as-builts, Digital Twin, 10-year capacity warranty

Each site is a standalone facility for guarantees, acceptance and warranty – no fleet averaging. Separate 3-year O&M (BEL).

Key Technical and Performance Requirements

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Area	Minimum requirement (Employer's Requirements)
Grid-forming	Primary mode at all sites; seamless GFM/GFL transition ≤ 50 ms; synthetic inertia H = 2–8 s
Black-start / island	≤ 5 min to stable island; ±2 % voltage, ±0.2 Hz; ≥ 4 h islanded at rated load
Response	Active power ≤ 200 ms, reactive ≤ 500 ms; ±1.0 pu Q at 0.9–1.1 pu V; FRT per IEEE 1547 / IEEE 2800
Guarantees	RTE ≥ 88 % at POI; usable MWh = 100 % at BOL (net at POI); availability ≥ 97.5 %
Battery	LFP only, Tier-1; ≥ 6,000 FEC; ≥ 80 % retention at 10 years; UL 9540A, NFPA 855 (2023)
Environment	Cat. 5 hurricane (ASCE 7-22 RC IV); C5-M corrosion; IP65 outdoor; 100-yr flood + 2 ft / surge + 1.5 ft
SCADA / cyber	Integration with BEL Minsait ACS PRISM 12; IEC 62443 SL-3; 1-s historian
Grid Code	Belize Grid Code (Appendix A) – compliance studies, testing and information to be detailed in Addendum No. 1

Logistics to Site (Appendix D)

GOPA

Mainland sites

- Ports of entry: Port of Belize (~28 ft draft) and Port of Big Creek (~34 ft draft)
- CIP delivery to each Site; Employer is importer of record (import duties and clearance)
- BESS = Dangerous Goods Class 9 – handling, labelling and documentation to be priced
- Ongoing road / bridge works on George Price, Philip Goldson and Thomas Vincent Ramos highways
- Coastal Plain Highway flood-prone June–November
- Heavy-haul / oversize permits by the Contractor

San Pedro – island logistics

- Southern Barge Terminal is the only approved landing point
- Channel draft ~7 ft: shallow-draft barge with heavy point-load capacity
- No crane > 25 t on the island – barge in own crane
- Street widths ~20 ft, tight turns; escorts mandatory; transport window 2:00 a.m.–5:00 a.m.
- Smaller containerised BESS units strongly recommended
- Limited ground bearing at landing and site – use mats; traffic management plan and Town Council approvals

Rated Criteria – Quality-Based Award (World Bank)

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The contract is awarded to the **Most Advantageous Bid** – not simply the lowest price. Quality and price are combined in one evaluated score.

≥ 50 %

minimum technical weighting the World Bank now applies for most international procurement

53 %

average quality weighting reached for high / substantial-risk procurements

65 %

technical weighting in this RFB (price 35 %) – reflecting the complexity of grid-forming BESS

What this means for Bidders

- A technically stronger bid can win at a higher price – grid-forming, black-start, battery life, design, logistics, and ESHS.
- Minimum technical requirements are pass / fail: complete scope at all four sites, LFP only, dual-mode GFM/GFL at every site, black-start ≤ 5 min and ≥ 4 h islanding.
- Source: World Bank procurement approach (quality-based awards, early market engagement); RFB Section III and BDS ITB 32.2.

How Bids Will Be Evaluated – Step by Step

GOPA

1	**Opening of Technical Parts**	23 Nov 2026, 3:30 p.m. Financial Parts stay sealed
2	**Responsiveness**	Documents, Bid-Securing Declaration, no price in Technical Part, minimum technical requirements (pass / fail)
3	**Qualification**	Eligibility, financial capacity, experience, specialised subcontractors / manufacturers (pass / fail)
4	**Technical scoring**	Rated criteria scored 0–4 per sub-factor by the evaluation committee → Technical Score T
5	**Opening of Financial Parts**	Public opening for Bidders whose Technical Parts are responsive
6	**Evaluated Bid Cost C**	Bid price + 15-year life-cycle cost (NPV at 10 %) + functional-guarantee adjustments (US$ 300,000 per % point)
7	**Combined score B**	Price 35 % / technical 65 % → Most Advantageous Bid, Notification of Intention to Award, standstill

Scoring Scale and Evaluated Bid Score

GOPA

Score	Meaning
0	Required feature absent – non-responsive
1	Present, with major deficiencies
2	Sufficient – meets the requirement
3	Good – marginally exceeds the requirement
4	Excellent – significantly exceeds, with added value

Combined evaluated Bid score

$$B = X \cdot (C_{low} / C) + (1 - X) \cdot (T / T_{high}),\ X = 0.35$$

- C = Evaluated Bid Cost; Clow = lowest C
- T = Technical Score; Thigh = best T
- Sub-factor scores × weights → factor score → T

Illustrative example (not real bids)

	Bidder A	Bidder B
Technical Score T (0–4)	3.2	2.6
Evaluated Bid Cost C	US$ 50 M	US$ 45 M
Price part 0.35 × Clow/C	0.315	0.350
Technical part 0.65 × T/Thigh	0.650	0.528
Evaluated score B	0.965	0.878

- Bidder A wins although its cost is ~11 % higher – the better technical solution outweighs the price difference.
- Every scored point matters: address every sub-factor explicitly.

What Evaluators Look for – Evidence per Factor

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Factor (revised weight*)	Evidence expected in the Technical Part (BDS ITB 11.2)
1 Grid-forming & black-start (30 %)	PCS & control description, GFM type-test / simulation results, seamless transition ≤ 50 ms, black-start sequence and timing, islanding performance, references
2 Guarantees & battery life (30%)	RTE, usable capacity and availability guarantees; cell / module datasheets, degradation curve, warranty terms, UL 9540A report, cooling design, augmentation plan; decommissioning & recycling options
3 Technical solution & design (25 %)	Architecture & integration narrative, preliminary SLDs per site, protection philosophy, fire & thermal concept, hurricane-hardened civil concept; IEC 62443 SL-3 plan; logistics & San Pedro marine plan
4 ESHS (15 %)	ES-MSIP covering site-specific risks (Iguana Sanctuary, fuel station, community, traffic), OHS plan, Code of Conduct, SEA/SH prevention and response

ADDENDUM No. 1 (to be issued)

Upcoming Addendum No. 1 – Key Changes

GOPA

1	**Clarification timeline**	Last day for clarifications 28 Oct 2026; all responses by 5 Nov 2026
2	**Geotechnical scope**	Soil electrical resistivity and soil thermal resistivity added to geotechnical investigations
3	**Grid Code compliance**	Grid Code compliance studies, compliance testing and information & documentation explicitly in EPC scope
4	**Earthing design**	Earth-mat design to IEEE 80 (step/touch, GPR) with IEEE 81 verification

ADDENDUM No. 1 (to be issued)

Additional EPC Requirements – Geotech, Earthing, Grid Code

GOPA

Geotechnical (ER 3.1)

- **Soil electrical resistivity**: Wenner 4-pin tests per IEEE 81 at BESS plot, cable route and substation tie-in; two perpendicular traverses, spacings up to ≥ 30 m
- **Soil thermal resistivity** and dry-out curve per IEEE 442 / ASTM D5334 at cable burial depth, incl. HDD route at San Pedro
- Results used for earthing and cable ampacity (IEC 60287) design

Earthing (ER 4.4, 7.2)

- Earth-mat design per **IEEE 80**: soil model, GPR, step and touch voltages for BEL fault levels and clearing times
- Bonding to existing BEL substation earth grid, fences and transferred potentials
- Verification by IEEE 81 fall-of-potential and step/touch measurements at SAT; target resistance from the IEEE 80 design

Belize Grid Code

- **Compliance studies** (Sec. 7): load flow, short circuit, protection coordination, RMS & EMT stability, PQ / harmonics, GFM validation, cable energisation
- **Compliance testing** (Sec. 8.2) incl. LFSM, FSM, reactive capability, voltage / Q / PF control
- **Information & documentation** (Sec. 9, Annex 11) incl. validated simulation models (Sec. 4.2.13)

Reminders for Preparing Your Bid

GOPA

1

Technical Part only

No price information in the Technical Part – otherwise the Bid is non-responsive (ITB 11).

2

Required documents

Cybersecurity plan, GFM / black-start evidence, battery life & augmentation plan, decommissioning strategy, design & integration narrative, logistics strategy, ES-MSIP, Code of Conduct (BDS ITB 11.2).

3

Financial Part

Price Schedules incl. BEL substation works per site, spare parts list (3 years), augmentation proposal (Year 6–7), separate 3-year O&M price (BDS ITB 11.3).

4

Usable, not nameplate

Specified MWh are usable at the POI at Beginning of Life – size nameplate accordingly.

5

Committed COD

State committed COD per site with a credible Level-2 programme and long-lead procurement evidence.

6

Site verification

Visit all four sites; all site data in Appendices must be verified by the Bidder.

Clarifications and Contact

GOPA

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ntorres@ceu.mof.gov.bz (site visit queries)

Web: procurement.gov.bz/opportunities

- Last day for clarification requests: **08 November 2026**
- All responses and Addendum No. 1: **by 12 November 2026**
- Bid submission: **23 November 2026, 3:00 p.m.** (opening 3:30 p.m.)

GOPA Tech

Questions & Answers

Please also submit your questions in writing to procurement@ceu.mof.gov.bz by 08 November 2026

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