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বাংলাদেশ পল্লী বিদ্যুতায়ন বোর্ড
BANGLADEASH RURAL
ELECTRIFICATION BOARD

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Memo No-27.12.0000.224.011.31.24-642

Date:2305.2026

Subject: Minutes of the pre-tender meeting & Responses to Tenderer's Clarification.

Ref: 27.12.0000.224.11.031.24.573; Dated: 19.04.2026

Project Name: Modernization and Capacity Enhancement of BREB Network (Dhaka-Mymensingh Division) (1st Revised) Project

Pre-Tender meeting Date & Time: 06 May, 2026 at 12.00 pm (Bangladesh Time)

Venue: Room No.- 907, Head Office Building (8th floor), Bangladesh Rural Electrification Board, Nikunja-2, Khilkhet, Dhaka-1229. Bangladesh.

Package No. and Title:

MCEP/BREB/DMD-W-392: Design, Supply, Installation, Testing and Commissioning etc. all Complete as Required for Establishment of Energy Storage System in Four Substation Each With 10MWh capacity (Dhaka-1, Mymensingh-2, Kishoreganj and Narsingdi-1 PBS) on a Turn-Key Basis.

PARTICIPANTS:

BREB, Dhaka	01	Project Director, MCEP(DMD), BREB, Dhaka.
	02	Additional Project Director, MCEP (DMD), BREB, Dhaka.
	03	Deputy Director (Tech.), MCEP(DMD), BREB, Dhaka.
	04	Assistant Engineer, MCEP(DMD), BREB, Dhaka.
Consultant	01	Md Geas Uddin Joarder, Team Leader, BESS Project, Innovate Engineering & Development
Attachment-1		Representatives of prospective Tenderers

Project Director, MCEP (DMD) Project was presided over the meeting. The project director welcomed all present at the meeting and requested to raise their queries if any. BREB's concerned officials & Team Leader of Consultant Innovate Engineering & Development clarified the verbal queries raised by the prospective tenderers. At the end of the meeting, the project director has requested all the prospective tenderers to review the tender documents appropriately and visit the site by their own management. Project director has also requested to submit any clarification (if any) in writing within the stipulated time as specified in tender documents. There were no other issues to discuss; The project director thanked everyone and announced the end of the meeting. Representatives from relevant Tenderers were also present at the Pre-tender meeting. The officials from the BREB & Experts of Innovate Engineering & Development clarify the statement of representatives from relevant Tenderers as stated below:

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01	Schedule for spare parts	There are no exact quantities provided for the Spare parts in the schedule. Will the spare parts price be included during evaluation?	The mandatory spare parts for the main contract shall be included in Schedules 1 and 2. The spare parts for Operation & Maintenance (O&M) are to be quoted separately under Price Schedule No. 6 - Recommended Spare Parts, as indicated in the Tender Document.

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The spare parts for Operation & Maintenance (O&M) are to be quoted separately under Price Schedule No. 6 – Recommended Spare Parts, as indicated in the Tender Document are revised with list of spare parts, as follows:

Schedule No. 6 - Recommended Spare Parts

Item	Description	Unit	Qty	Unit Price		Total Price	
				EXW Local Parts Local Currency	CIP Imported Parts Foreign Currency	Local Currency Portion	Foreign Currency Portion
1	2	3	4	5	6	7 = 4 x 5	8 = 4 x 6
1	LFP Battery Cell	Nos	10,000				
2	Cable Jointing /Termination Kit	Lot	1				
3	Cooling Systems	Lot	1				
4	Control Cables	Lot	1				
5	Exhaust Fan	Nos	12				
6	Monitoring Systems	Lot	1				
7	Fire Fighting Systems	Lot	1				
8	PCS & Power Electronics	Lot	1				
9	Protection & Auxilia	Lot	1				

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			ries TOTAL *(must be filled)* *Note: 1. Specify currencies in accordance with ITT 27. Create and use as many columns for Unit Price and Total Price as there are currencies* Name: *[insert full name of signatory]* — *Signature with Date and Seal* In the capacity of: *[insert designation of signatory]* — *[Sign]* Duly authorized to sign the Tender for and on behalf of the Tenderer **Corrigendum** will be issued accordingly.
02	Clause 18 of the Tender Publication titled "Eligibility of Tenderers" The Tenderer or in case of JVCA, any partner shall have the minimum specific experience as an EPC turnkey contractor or as a Contractor or Subcontractor or Management Contractor in similar to the proposed plant and services under maximum 03 (Three) contract(s) of similar nature, complexity and methods/ construction technology successfully completed within last 10 (Ten) years with total value as bellow:	Definition of similar nature	Defined in ITT 13.1(b) in the Section 2 TDS
03	Standard Clarification	Is European Standard Acceptable?	European standards equivalent to international standards are acceptable.

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04	Clarification Regarding IP65 and IP54 Ratings Page 225: Supply of Battery Container, Standard 20 feet Container, IP 65; Supply of Containerized solution with PCS and bi-directional transformers, outdoor type, IP65 or better, Page 254: Protection: Minimum IP54, compliant with IEC 60529/GB4208	These two descriptions are inconsistent, the IP class for battery containers and MV Skid are normally IP54.	The requirement is for IP65 for the BESS enclosures and also for the PCS containers including the transformers. Page 254 shall read: minimum IP65 Corrigendum shall be issued accordingly.
05	ITT 13.1(b) The Tenderer or in case of JVCA, any partner shall have the minimum specific experience as an EPC turnkey contractor or as a Contractor or Subcontractor or Management Contractor in similar to the proposed plant and services under maximum 03 (Three) contract(s) of similar nature, complexity and methods/ construction technology successfully completed within the last Ten (10) years, with a value of at least USD 5,600,000.00 (Five Million Six Hundred Thousand USD) or equivalent	Is it "Maximum 03 contracts" or "Minimum 03 contracts"? Can it be increased if it is "Maximum 03 contracts"	Do not provide more than 3 contracts for evaluation.

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	other currencies.		
06	ITT 63 Page no. 66,	Clarify O&M Contract performance security release.	ITT 63 b Phase 2 – O&M Contract details are revised as follows: **b. Phase 2 – O&M Contract:** Operation & Maintenance (O&M) Services for 7 years (starting from 6th year to 12th year), commencing upon the successful completion of the Defects Liability Period (DLP) under Phase 1. • Phase 2 may be awarded at the Employer's discretion based on the employer's satisfaction with the Support Services provided during the Warranty period. • Where Phase 2 is awarded, the Contractor shall be obligated to enter into a separate contract with the Employer and submit a separate Performance Security for O&M Contract, in an amount equal to ten percent (10%) of the O&M Contract Price (Phase-2), no later than twenty-eight (28) days prior to the completion of the Defects Liability Period (DLP) under Phase 1. The Security shall remain valid for its full value until completion of the seven (7)-year O&M period plus an additional twenty-eight (28) days. The contract shall be executed in accordance with the PPR 2025 rules and regulations and financed from BREB/PBS own budget. Corrigendum will be issued accordingly.
07	Connection Time The Black start process time will not be more than 1 min	Name of the Prospective Tenderer: ZTT The BESS has the black start function, but the process time cannot be determined only by the BESS.	The 1-minute black start time applies only to BESS internal sequence from black start command to PCS output ready at 11 kV. External switching time is excluded. Corrigendum will be issued accordingly.
08	Schedule G Performance Guarantees and KPIs Annual Availability System: ≥ 98%	How will it be calculated?	Annual Availability shall be defined and measured as follows: Availability is defined as the ratio of available operating hours to total annual hours, expressed as a percentage. Availability = (Total Annual Hours – Downtime Hours) / Total Annual Hours × 100% Total annual hours shall be taken as 8,760 hours, representing 365 days at 24 hours per day. Downtime hours include any period during which the BESS is unable to deliver rated power or perform its intended functions due to equipment failure, malfunction, or system fault. The following periods shall be excluded from the downtime calculation:

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			• Scheduled preventive maintenance, not exceeding 40 hours per calendar year • Grid outages occurring upstream of the Point of Connection beyond BESS control • Force majeure events as defined in the General Conditions of Contract • Time awaiting grid restoration following a grid outage • Scheduled testing and commissioning activities agreed in writing with BREB Availability shall be measured at the 11 kV Point of Connection. Corrigendum will be issued accordingly.
09	C. Qualification Criteria 17. Joint Venture (JV) 17.4 JV shall nominate the Lead Partner as Representative or Partner-in-charge being entrusted with the Contract administration and management at Site who shall have the authority to conduct all business for and on behalf of any and all the partners of the JV during the Tendering process and, in the event the JV is awarded the Contract, during contract execution including the receipt of payments for and on behalf of the JV. 17.5 The business share of the Lead Partner shall be the highest among all the partners. Other partner(s) shall	If a foreign firm forms a JV with a local firm, then the local firm shall have more share than the Foreign Firm. But if the lead firm is the Foreign Firm, then the clause is contradictory. If a Foreign Firm forms a JV with two local companies, then can the total share of the two companies together be greater than the foreign firm?	The lead partner must have a higher share than any of each of the other partners, but the two other partners can have a higher share than the lead partner. There is no restriction of countries except the ones listed in ITT 5.1.

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	have at least 25% of business share each.		
10	TDS: JV Table ITT 17.2	ITT 14.1 (d) details are not found	The provision of ITT 14.1(d) is to be omitted. Corrigendum will be issued accordingly.
11	Schedule No. 1 12.1 Supply of SCADA system for Real time monitoring and control. which shall incorporate the existing substation's components for complete monitoring and control of the entire Substation & BESS system and Integration with power grid system	What Type of SCADA system required?	Please follow Detailed Technical Specification 9 SCADA (Page 307)
12	Clarification regarding receiving local currency	If a foreign firm wins the bid, then what should he do to receive the local currency portion? Do they need to open an account or a sub-company?	If a Foreign Firm is awarded the Contract, payment procedures, including receipt of the local currency portion, shall be governed by the applicable laws and regulations of Bangladesh, as well as the provisions of the Contract. The successful Tenderer shall make the necessary banking and legal arrangements, including opening a local bank account, if required, in accordance with the prevailing rules and regulatory requirements. Establishment of a local office/entity shall be subject to the applicable laws and authorities of Bangladesh
13	SLT	Is SLT applicable during evaluation or not?	Evaluation will be carried out as per BPPA regulations & World Bank Tender document requirements. Please follow the provisions of the Tender Document.
14	Clarification Regarding LCOS	Will the Tenderer give the data of 12 years after the Defect Liability Period or including the Defect Liability Period?	The Tenderer shall calculate and submit the data for a total period of 12 years, including the 5 (five) years Defect Liability Period (DLP) and the subsequent 7 (seven) years Operation & Maintenance (O&M) period. It is to be noted that the wording related to LCOS under Section 2: Tender Data Sheet (TDS), ITT Clause 57: Price Comparison paragraphs 1st, 2nd & 3rd, has been revised as follows: "Among the responsive Tenders, the Employer shall carry out the price comparison based on CAPEX (as per Schedule No. 5: Grand Summary) and OPEX through the LCOS formula, as detailed below, to determine the Lowest Evaluated Tender. The Tender with the lowest evaluated cost by applying LCOS shall be ranked as the 1st responsive Tenderer and the

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			subsequent Tenderers shall be ranked accordingly." Corrigendum will be issued accordingly.
15	ITT 29.3 (b) Spare parts are: required. Period of time the Equipment are expected to be functioning (for the purpose of spare parts): Twelve (12) years.	Will the lifetime of the spare parts be 12 years?	Spare parts shall be fully compatible with the equipment and comply with the relevant Technical Specifications of the Tender Document. The required lifetime for major equipment/parts, as specified as 12 years in the Technical Specifications, shall apply accordingly.
16	Schedule No.5 – Grand Summary	1. Will the foreign currency be converted in the form? 2. What will be the conversion rate of the Foreign currency?	Please follow the provisions of the Tender Document under Section I: Instructions to Tenderers (ITT), specifically ITT Clause 54: **Conversion to Single Currency.** 1. The foreign currency shall not be converted during submission of the Tender Form. 2. The conversion shall be made using the selling exchange rates established by Bangladesh Bank on the date of Tender opening.
17	ITT 14.1 (c) The required average annual turnover shall be greater 8,770,000.00 USD (Eight Million Seven Seventy Thousand USD) or equivalent other currencies over the best three (3) years in the last five (5) years.	Will the tenderer submit just the Average Annual Turnover of three (3) years or five (5) years?	The tenderer will submit the Average Annual Turnover rate of the last five (5) years and among them the best three (3) will be selected.
18	Page: 166 3.3 Average Annual Construction Turnover	How many years of Turnover is required?	The tenderers shall submit Average Annual Construction Turnover of five (5) years and from these five (5) years, the best three (3) will be calculated.
19	Page: 286 Cycle Time: The Battery System shall guarantee ≥70% capacity retention after 12 years of operation OR ≥8760 equivalent full cycles at 80% DoD	1. ≥70% capacity retention after 12 years of operation is not possible. Can it be less? 2. Can the cycles per day be reduced from 2 cycles per day to 1 cycle per day?	The requirement is revised to: ≥70% capacity retention after 12 years OR ≥8760 equivalent full cycles at 80% DoD (1 cycle per day for 12 years), whichever comes first. Bidders shall comply with the EoL requirements. Functional guarantees shall be issued as corrigendum. **Corrigendum will be issued accordingly.**

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	(2 cycles per day for 12 years), whichever comes first		
20	Clarification Regarding PCS	Name of the Prospective Tenderer: UCCL The bidder raised concerns regarding the tender's specified centralized BESS configuration (5 MW / 10 MWh PCS in a single 40-ft container per site). While acknowledging its advantages in compact design and potentially lower capital cost, the bidder highlighted higher operational risk due to a single point of failure. In case of PCS fault, a significant portion of the 5 MW capacity could become unavailable, impacting system reliability and grid support. The bidder proposed a string-based BESS architecture as an alternative, distributing capacity across multiple smaller PCS units (200–250 kW each, approx. 20–24 units in parallel), with each PCS paired with dedicated battery racks for independent operation and improved reliability.	The requirement remains, but the bidder may provide a more resilient approach.
21	6.2.1.2 Container (Page 254) Technical Requirements & Features Battery Containers (2 × 20 HC): Material: Corten steel, flat roof, stackable. Protection: Minimum IP54, compliant with IEC 60529 / GB4208. Insulation: Double-layer steel with Class A fire-	Sl. No. 21-32 Name of the Prospective Tenderer: ZTT Walk-in Design for such 10MWh Battery container as it will be mostly occupied by battery. If walk-in design is required, then container size will increase along with cost increase. Is the walk-in design mandatory or not?	Non-walk-in design is acceptable. The requirement is: • Safe access for maintenance • Emergency egress within 10 seconds from any interior point • Quick-release panels or emergency doors Corrigendum will be issued accordingly.

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	retardant rock wool. Coating: Primer (zinc-rich) + Epoxy + Acrylic; Base frame: Asphalt. Pressure Balance: Passive vents opening at >1.2 MPa. Safe Escape: Walk-in design with emergency doors or quick-release panels.		
22	6.2.3 Thermal Management System (TMS) Design & Integration: Redundancy for water pumps and cooling units to ensure continuous operation during partial failures.	As the capacity of the battery container is bigger, there is 'no space for redundancy of pumps and cooling units, but there will be inventory of the spare parts on site in case some components are broken, it will be replaced in time.	Full redundant cooling units within each container are required. It is also accepted that full cooling units are supplied ready to replace the cooling units in case of need. The bidder shall explain the procedure in its proposal.
23	Page: 225 6.1.2 Particular: 2.3 Supply of Bi-directional Transformer: MV Transformer- Step Up/Step Down Transformer, 6.25 MVA, 11kV/ 0.69KV AC and vice versa, DYn11, Tap changer +/- 5 %.	Please clarify the connection requirements. The connection for transformers should be Dy11 or Dy11-y11, what is meant by DYn 11?	The correct vector group is Dyn11 (Delta primary, Wye secondary with neutral brought out). The neutral is required for the PCS. The typo "DYn11" is corrected to "Dyn11". A three-winding transformer (Dy11-y11) is not required.
24	**Fire Detection and Alarm system** (a) Fire Alarm Panel: 16 Zone Capacity: Supply and Installation of 16	Because it is small project in each substation, single zone fire alarm control panel is available. Please confirm that this requirement is not mandatory.	It will be according to the Specifications of Tender Document.

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	Zone Conventional Fire alarm control panel with power supply unit, batteries and other accessories. The panel shall be complete with zone indicating LED, Fault Indication and optional telephone Jack etc. The pane shall be input 220V AC and output 24V DC. Panel shall be confirmed UL Listed or EN54.		
25	6.2.9 Detailed Technical Specifications (Page: 285) Self-Discharge Rate: Self-discharge or standby energy loss rate shall not exceed 0.4% per month during construction or long-term storage, verified by factory test data.	Normally self-discharge should not exceed 3% per month, and it cannot be verified by factory test data as it is a small project.	• From FAT to installation at site, a certain loss will happen, from the port to the site and on the site during the construction, further losses will happen. By the time of commissioning, the SOH shall be measured as well as the energy. The test will be done at that time and the verification also. • The bidders shall submit datasheet or a statement by the manufacturer with the losses per month including the required meteorological conditions. • The bidder shall factor that in BoL capacity versus the EoL obligations.
26	6.2.9 Detailed Technical Specifications (Page: 286) Round Trip Energy Efficiency ≥90%(BOL), ≥82%(EOL) Bidder shall provide round-trip efficiency degradation schedule over system life.	What is the point for RTE test? including the auxiliary power consumption or not?	The RTE measurement boundary is clarified as follows: • **Measurement point:** 11 kV side of the bi-directional transformer (Point of Common Coupling – PCC). • **Included losses:** PCS conversion, transformer losses, internal container auxiliaries (BMS, liquid cooling, fire panel, internal lighting, control power), and interconnection cables. • **Excluded losses:** External substation auxiliaries (office lighting, security, SCADA control room power).
27	LCOS Calculation Example: (Page 66) N.B.: The values shown in the table	These two descriptions are inconsistent, as the normal battery container capacity now is 5MWh, in this case the rated	The provision for the Rated Capacity and Rated Power at the End of Life remains unchanged and as it is in the Tender Document. No additional containers or land space are available beyond

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	above are provided only as an example to illustrate the calculation method. These figures shall not be considered as required, indicative, real or limiting for the Tenderers. All Tenderers must submit their own guaranteed energy values as per the manufacturers' certificates and degradation curves as well as cost figures in accordance with their proposed system design and performance using the price schedules. Battery Container (Page 288) 4.2 Rated Capacity (MWh) 2x5 MWh (End of life must be ≥2x5 MWh)	capacity should be 10MWh(2*5MWh) in the beginning of life (BOL), not at the end of life (EOL), otherwise more containers will be needed and there will be problems for land space on site.	the 2×20 ft containers already specified. It is to be noted that the wording related to LCOS under Section 2: Tender Data Sheet (TDS), ITT Clause 57: Price Comparison, has been revised. **Corrigendum will be issued accordingly.**
28	Page 293 B. Power Conversion System (PCS) 1.6 Rated Capacity 6.25 MVA	6.25MW PCS is not mature product, standard product is SMW, if the initial rated power is 5MW, we can use 5MW PCS, please confirm 6.25MW PCS is not mandatory, the Tenderers can provide their own proposals.	The Tender requirement for the PCS shall remain as specified in the Technical Specification. The minimum rated active power of the PCS is ≥5 MW, while the required rated apparent capacity is 6.25 MVA. Therefore, Tenderers shall propose a PCS solution compliant with the specified 6.25 MVA rating and all associated technical requirements. Please follow the provision of the Tender Document
29	ATS (Page 298) The Automatic Transfer Switch (ATS) or equivalent motorized switchgear shall provide fast, safe, and reliable physical switching between the grid and the Battery Energy Storage	ATS is not available here for utility high voltage Battery energy storage system, only can be used in the low voltage system.	ATS is mandatory. Please follow the provision of the Tender Document.

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	System (BESS) at the 11 kV level. The ATS is responsible for ensuring seamless transfer of power sources within a specified maximum transfer time (typically ≤ 100 ms) to maintain continuous power supply and system protection. The Energy Management System (EMS) shall perform high-level monitoring, control, and optimization of energy flows between the grid, BESS, and loads. While the EMS manages operational logic and sends control commands, it does not perform physical switching; this is the role of the ATS or other switching devices. Both ATS and EMS shall be integrated to ensure coordinated operation, safety, and compliance with relevant standards and project requirements. The contractor shall provide detailed technical specifications, integration diagrams, and operation procedures demonstrating the interface between the ATS and EMS.		

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30	Page 223 24.The battery system shall include an approved means of sectionalizing the cell string(s) into segments of not more than 600 volts (open circuit) for maintenance activities for systems with an open-circuit series cell string voltage above 600 volts DC nominal, and these switches need not be load-break switches. Provisions shall be included in non-load-break switches to ensure that the string disconnect device(s) is (are) open before the sectionalizing switches can be opened or closed. 26.A means of disconnecting the string from the rest of the system and shall include resettable (not fused) over current protection shall be included in each electrically series connected string of unit batteries.	Please confirm what is meant by string cells? Does it refer to a Battery Module? or a Battery Rack?	"String cells" refers to an electrically series-connected group of cells forming a single DC circuit. In a typical BESS configuration: • Cell → individual battery cell (3.2 V nominal) • Module → series-connected cells (e.g., 16 cells = 51.2 V) • Rack / Cluster → multiple modules in series (e.g., 384 cells = ~1,228 V) • String = one series branch within a cluster. For a 1P384S cluster, the entire cluster is one string.
31	Page 259 6.2.1.5 PCS A local human-machine interface (HMI) with touchscreen or keypad shall allow operators to access real-time operational data, fault logs, system history, and manual control functions. The PCS shall seamlessly	Normally there is no HMI on EMS hardware, but there will be a laptop in the control center to monitor all the data and operations	As per Tender Document Please follow the provision of the Tender Document.

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	integrate with the Battery Management System (BMS) and Energy Management System (EMS) for coordinated system control.		
32	Last date for Submission of Tender & Time 04-06-2026 up to 12.00 noon (BST)	Request for time extension for 30 days We respectfully refer to the ongoing BESS tender submission scheduled on 04-06-2026. In this regard, we would like to request your kind consideration for an extension of the submission deadline for at least 30 (thirty) days from the current submission deadline. We are submitting the following reasons for your kind consideration. 1. Eid-ul-Adha festival, (a significant portion of the project timeline is impacted by national holidays and limited operational capacity). 2. Principal alignment with full compliance. 3. Arrangement of bid security (BG) 4. Detailed solution alignment and necessary site visits. 5. Comprehensive evaluation of cell chemistry and product quality analysis with comply the LCOS requirement. 6. To manage all the standard & certification compliance.	Advertise corrigendum will be published later.
33	ITT 13.1(b) C. Qualification Criteria Page No.: 52	Sl. No. 33-53 Name of the Prospective Tenderer: SARBS, Comcore The Tenderer or in case of JVCA, any partner shall have	The statement is "The Tenderer or in case of JVCA, any partner shall have the minimum specific experience as an EPC turnkey contractor or as a Contractor or Subcontractor or Management Contractor in similar to the proposed plant and services under maximum 03 (Three) contract(s) of similar nature, complexity and

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		the minimum specific experience as an EPC turnkey contractor or as a Contractor or Subcontractor or Management Contractor in similar to the proposed plant and services under maximum 03 (Three) contract(s) of similar nature, complexity and methods/ construction technology successfully completed within the last Ten (10) years, each with a value of at least USD 5,600,000.00 (Five Million Six Hundred Thousand USD) or equivalent other currencies. Q. In this sentence, the term "each" is mentioned with a value of at least USD 5,600,000.00 (Five Million Six Hundred Thousand USD) or equivalent other currencies. Our request is to replace "each" with "total".	methods/ construction technology successfully completed within the last Ten (10) years, with a value of at least USD 5,600,000.00 (Five Million Six Hundred Thousand USD) or equivalent other currencies." -As per the tender document.
34	ITT 13.1(b) C. Qualification Criteria Page No.: 52 ITT 23.2(s) Sl. No.: iv & v D. Preparation of Tender Page No.: 55	In support of experience as mentioned above the tenderer must submit certificates from clients (End user certificates) specified above in end user's letterhead pad in English and mentioning that the system/plants are in operation at least for 01 (One) Year. The above certificates must contain end-user's full address, email address, website address and phone/cell number for the convenience of authentication. iv. The tenderers shall submit evidence of successful operation from end user for a minimum 1year of BESS station/similar plants.	The requirement is not contradictory. Clause (iv) refers to evidence of successful operation for a minimum of 1 (one) year of BESS station/similar plants as a whole by the Tenderer, while Clause (v) refers to submission of 3 (three) years satisfactory service and operation experience within the last 10 years for specified equipment of respective manufacturers under similar climatic and technical conditions. Accordingly, Tenderers shall comply with both requirements independently as stated in the Tender Document.

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		v. The tenderers shall submit Three (03) years satisfactory service and operation certificate from end user within last 10 years in humid tropical climate of similar specification required by this BID for the equipment of battery cell, PCS, BMS, EMS, Transformer (each equipment matching to its similar application of required BESS system) of Respective Manufacturers. -Will the project's operational period be 1 year or 3 years? This seems contradictory to us. Please clarify this	
35	ITT 70.1 Page No.: 67	The Procuring Entity shall deduct from the payment certificate, a retention amount at the percentage rate of Ten (10) percent from the payment certificate as Retention Money. Q. Retention money 10%, and Performance Security 10%, total 20%, if it is stuck for 5 years, then this will actually put a big load on the total financial calculation of the entire project. We are requesting that you keep only a 10% performance guarantee.	The Retention Money (10%) shall be released with the final payment upon successful completion of the works, subject to satisfactory fulfillment of all contractual obligations. The Performance Security (10%), however, shall remain valid and enforceable until the completion of the Defects Liability Period (DLP), thereby ensuring coverage against any defects or performance-related obligations during this period. Accordingly, both Retention Money and Performance Security serve distinct contractual purposes and shall be applied in accordance with the provisions stipulated in the Tender Document, which shall remain unchanged.
36	ITT 26.6 D. Preparation of Tender Page No.: 56 And ITT 29.3 (b) D. Preparation of Tender Page No.: 57 And 27.3 PCC Page No.: 82 And GCC 27.3 GCC Page No.: 130 And Schedule No. 6 -	Price Schedule-7 has been included in Section- 5 (Tender and Contract Forms- Schedule of Rates and Prices) based on the requirements of the O&M Contract "Operation and Maintenance (O&M) Services Contract for the BESS System of four (04) sites". Spare parts are: required. Period of time the Equipment are expected to be functioning (for the purpose of spare parts):	Price Schedules No. 1 and 2 under Form PG5A-3 are intended for the main equipment/systems, including mandatory spares required for the Defects Liability Period (DLP). The Tenderer should quote the price including mandatory spare parts for the DLP time period. The spare parts for Operation & Maintenance (O&M) are to be quoted separately under Price Schedule No. 6 – Recommended Spare Parts, as indicated in the Tender Document are revised with list of spare parts. Tenderers are required to submit prices for the recommended spare parts under Schedule No. 6 only, based on the requirements of their proposed/supplied system. These

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	Recommended Spare Parts Page No.: 194 And Schedule No. 7 Operation & Maintenance Service (including mandatory Spare Parts) Page: 195	Twelve (12) years. In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts required for the operation and maintenance of the Facilities for the period specified in the PCC and the provisions, if any, specified in the PCC. However, the identity, specifications and quantities of such spare parts and the terms and conditions relating to the supply thereof are to be agreed between the Procuring Entity and the Contractor, and the price of such spare parts shall be that given in Price Schedule No.1 & 2 under form PG5A-3, which shall be added to the Contract Price. The price of such spare parts shall include the purchase price therefor and other costs and expenses (including the Contractor's fees) relating to the supply of spare parts. The Contractor agrees to supply spare parts for a period of Seven (07) years, to support O&M requirements after completion of the Defects Liability Period (DLP), covering Years 7 to 12 of operation, in addition to the mandatory spare parts for the five (05) year DLP period. The Contractor shall carry sufficient inventories to ensure an ex-stock supply of consumable spares, Other spare parts and components for the Plant. Q. There is no row for Spare Parts	recommended spare parts costs shall not be incorporated into the main equipment prices under Price Schedules No. 1 and 2. Evaluation and comparison shall be conducted strictly based on the duly completed price schedules in accordance with the instructions provided in the Tender Document, ensuring uniformity, consistency, and fairness among all Tenderers. Corrigendum will be issued accordingly.

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		in Price Schedule No.1 & 2 under form PG5A-3. There is a separate Price Schedule for Spare Parts called Schedule No. 6 - Recommended Spare Parts. Our question is, 1) Since there is no specific mentioned of Spare Parts in the Price Schedule No.1 & 2, how do we count Spare Parts? If we add the amount of Spare Parts with the main product as we like, then the total cost amount of the product will be increased. In that case, the other bidder may not do count such as us, they may count very less or not count at all, and will be the lowest bidder. How to catch them while the project is ongoing? They are not worried about PG because they are counting the cost of spare parts among the PG loss, they have won the project, delivered the product, received the payment and gone. It is our humble request to mention the exact Spare Parts list in this Bid, so that all Tenderers should be count on it properly.	
37	6.2 Technical Specifications 6.2.1 Containerized Battery Energy Storage System (BESS) Design Page No.: 254	Submission Requirements & Notes • Power distribution schematics, UPS sizing, critical/non-critical load diagram. • CRP drawings, breaker specifications, relay configuration files. • Protection coordination, insulation coordination, lightning and earthing layouts. • Deliver a 5-year warranty including spares, software/firmware updates, and maintenance support. • Provide post-warranty	As Per Tender Document. Please follow the provision of the Tender Document.

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		maintenance recommendations and critical spares list. • Compliance certificates of the equipment shall be submitted, along with ISO 140001 and ISO 9001 compliance; We are requesting you to provide a list of documents to be submitted along with the Bid.	
38	6.2 Technical Specifications 6.2.1.2 Container Page No.: 254 Safe Escape: Walk-in design with emergency doors or quick-release panels.	Based on industry practice, 5MWh battery containers are typically designed as non walk-in type, offering better compactness and cost efficiency. Considering the dimensional constraints of a standard 20HC container, a 5MWh configuration is inherently based on a non-walk-in design. Walk-in solutions would require a larger container size and therefore would not align with the 20HC form factor. At this stage, could we use a 20-foot high-cube container (non-walk-in) configuration as the baseline option?	**Non-walk-in design is acceptable.** The requirement is: • Safe access for maintenance • Emergency egress within 10 seconds from any interior point • Quick-release panels or emergency doors Corrigendum will be issued accordingly.
39	6.2 Technical Specifications 6.2.1.2 Container Page No.: 254 Submission Requirements & Notes • Container drawings, material and paint specs. • Signal mapping lists (BMS/PCS/EMS) with communication protocols. • Power distribution schematics, UPS	We are requesting you to provide a list of documents to be submitted along with the Bid.	As Per Tender Document. Please follow the provision of the Tender Document.

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	sizing, critical/non-critical load diagram. • Protection coordination, insulation coordination, lightning and earthing layouts. • The BESS and all associated systems shall comply with applicable international and local standards, including but not limited to- IEC: 60529 (IP rating), 60255 (protection relays), 62109-1/2 (PCS safety), 62933-2-1 (stationary ESS), 61850 (communication), 62305 (lightning), 60071-1/2 (insulation), 60364-5-54 (earthing), 62619 (battery safety); IEEE: 1547 (interconnection), 1679.1 (BESS fire protection), 2030.11 (DER control), C37.04 (switchgear ratings); UL / NFPA: UL 9540 / 9540A (ESS safety), UL 1973 (batteries), NFPA 72 (fire alarms), NFPA 855 (ESS installation). • Deliver a 5-year warranty including spares and maintenance		

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	support. • Provide post-warranty maintenance recommendations and critical spares list.		
40	6.2 Technical Specifications 6.2.1.2 Container Page No.: 254 And 6.2.9 Detailed Technical Specifications 4. Battery Container Sl. No.: 4.6 Page No.: 289 Protection: Minimum IP54, compliant with IEC 60529 / GB4208. 20HC (6058x2438x2896 mm) or equivalent, Standard 20 feet container. Containerized Solution with Battery Racks & Modules, Internal General Arrangement (GA). RAL 7035 or Off-white colored or better and with customized logo, IP65 or better, Shock proof, Rust proof, Anti-corrosion. (Standard Specification and Drawings to be submitted)	Minimum IP54 for the battery container is well aligned with mainstream industry practice and will be adopted in our baseline design. Regarding the "IP65 or better" requirement stated in the GTP, we understand this may refer to specific internal components (e.g. battery modules/pack level) rather than the complete container. Please clarify.	See the answer to query no. 04
41	6.2 Technical Specifications 6.2.1 Containerized Battery Energy Storage System (BESS) Design	We understand that the system is required to provide grid-forming capability, including stable voltage and frequency regulation in island mode, as well as transition between grid-	Seamless transition is required in both directions (grid-connected ↔ island mode) without interruption to the load. The synchronization function shall be built-in within the PCS/BESS. No additional external synchronization equipment is required.

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	6.2.1.1 General Page No.: 253 And 6.2.1.5 PCS Page No.: 260 The BESS shall also provide grid forming capability, enabling autonomous voltage and frequency regulation during islanded operation (grid forming) and seamless transition between grid-connected and island modes. Grid-Forming Operation PCS shall support grid-forming functionality to enable autonomous voltage and frequency regulation in critical load backup mode. PCS shall seamlessly transition between grid-connected and island operation without interruption to the load. PCS shall maintain stable voltage, frequency, and power quality under varying load conditions in off-grid operation.	connected and island operation. In practice, seamless transition from grid-connected to island mode is typically achieved with PCS operating in VSG mode, while VF mode is used to ensure stable operation in islanded conditions. For the transition from island mode back to grid-connected operation, additional synchronization equipment (e.g. synchronising device) is normally required to ensure proper grid reconnection, which may also impact system cost and configuration. To ensure proper system design, could you kindly clarify which direction of transition (grid-connected → island or island → grid-connected) is required to be seamless?	The PCS in grid following mode shall support Low Voltage Ride Through (LVRT) capability in accordance with applicable grid code requirements. Corrigendum will be issued accordingly.
42	6.2 Technical Specifications 6.2.1.3 Battery System Page No.: 257 Submission Requirements and Notes Documents	We are requesting you to provide a list of documents to be submitted along with the Bid.	As Per Tender Document. Please follow the provision of the Tender Document.

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	and Drawings to be Submitted: • System-level single-line and layout drawings showing battery hierarchy (cell–module–cluster–system). • Detailed specifications for cells, modules, and clusters. • Cooling system schematic, including flow rate, inlet/outlet temperature, and safety controls. • Structural drawings of racks, boxes, and combiner cabinets with mechanical load analysis. • Compliance certificates (IEC 62619, IEC 62620, UL 1973, UL 9540A, UN 38.3). • Thermal management design documentation and leak prevention test reports. • Fire suppression and safety integration plan compliant with local and international fire standards. • The complete battery system, including BMS, shall ensure safe isolation, precise control, and full SCADA/EMS interoperability using Modbus TCP/IP or IEC 60870-5-104. • The system shall be factory		

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	preassembled and pretested before shipment to minimize on-site work. • Each subsystem shall be designed for modular replacement without full system shutdown. • All components shall be designed for outdoor or containerized installation, meeting IEC 60529 (IP rating) and IEC 60068 (environmental test) standards. • The contractor shall provide detailed O&M manuals, including calibration and troubleshooting procedures.		
43	6.2 Technical Specifications 6.2.1.3 Battery System Page No.: 257 Compliance certificates (IEC 62619, IEC 62620, UL 1973, UL 9540A, UN 38.3).	IEC 62620 is a cell-level performance test standard rather than a certification scheme. In practical industrial applications, its key performance requirements are typically demonstrated through a combination of existing standards and test reports. May we consider compliance with IEC 62619, UL 1973, UL 9540A, UN 38.3, together with battery performance test reports (including charge/discharge rate capability, cycle performance tests, and safety abuse tests, etc.) as the basis for performance verification?	The Tender requirement shall remain unchanged. Compliance documentation for IEC 62619, IEC 62620, UL 1973, UL 9540A, and UN 38.3 shall be provided as specified in the Tender Document. For IEC 62620, the Tenderer shall provide appropriate test reports demonstrating compliance with the applicable performance requirements, including charge/discharge capability, cycle performance, and related performance tests. Please follow the provision of the Tender Document.
44	6.2 Technical Specifications 6.2.1.4 BMS Page	BMS is an indispensable part of BESS and generally does not require separate certification.	1. System-level compliance is acceptable. The BMS is an integral part of the BESS and does not require separate certification. System-level certificates (IEC 62619

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	No.: 259 List of compliance certificates (IEC 62619, IEC 61000, IEEE 1184, etc.) and relevant factory test reports.	1. Can we provide system level compliance documents for BESS (e.g., certificates demonstrating compliance with IEC 62619 and IEC 61000) as evidence of conformity? 2. Regarding IEEE 1184, this standard is a design guideline for UPS battery applications and does not directly apply to the certification requirements for BMS or BESS. Please confirm whether this requirement applies to BMS.	for the battery system, IEC 61000 for EMC) are acceptable evidence of compliance. **2. IEEE 1184 is not applicable and is deleted.** IEEE 1184 is a design guideline for UPS battery systems, not for grid-scale BESS BMS. This requirement is deleted. The BMS shall comply with: • IEC 62619 (safety, via system-level) • IEC 61000 series (EMC) • Functional requirements as specified in the BMS section Corrigendum will be issued accordingly.
45	6.2 Technical Specifications 6.2.1.4 BMS Page No.: 259 Submission Requirements The bidder shall provide the following documents, drawings, and technical evidence along with the bid: • Detailed BMS architecture diagram showing BMU, BCMU, and communication layout. • Functional description covering monitoring, control, and protection features. • Technical data sheets specifying rated voltage, current, measurement accuracy, sampling rate, and communication protocols. • Software function overview, including SOC and SOH calculation logic,	We are requesting you to provide a list of documents to be submitted along with the Bid.	As Per Tender Document. Please follow the provision of the Tender Document.

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	capacity calibration method, and data logging capability. • Safety and protection schemes, including overvoltage, undervoltage, overcurrent, overtemperature, and insulation fault responses. • Display and monitoring interface screenshots showing parameter visibility and alarm functions. • Graphical representation or plots (SOC curve, temperature vs. performance curve, and balancing efficiency graphs) demonstrating expected system behavior under different operating conditions. • List of compliance certificates (IEC 62619, IEC 61000, IEEE 1184, etc.) and relevant factory test reports.		
46	6.2 Technical Specifications 6.2.1.5 PCS Page No.: 261 Standards compliance certificates (IEC 62109, IEC 61439, GB/T34120, or applicable IEC standards).	1. Could you provide a template for thermal and environmental performance validation reports? 2. We understand that the listed standards apply to different types of equipment. In practice, compliance of the PCS is typically based on relevant IEC standards applicable to power conversion equipment. IEC 62109 is the primary	1 Bidder shall submit their standard thermal validation report (manufacturer's format). 2 For PCS safety compliance, IEC 62109-1 and IEC 62109-2 are the primary international standards for power conversion equipment. These are mandatory. As an alternative, IEC 62477-1 is also acceptable. IEC 61439 applies to low voltage switchgear assemblies, not to the PCS itself. This standard is not applicable to the PCS and is therefore deleted from the PCS requirements. Regarding GB/T 34120, it is the Chinese national standard for power conversion systems used in electrochemical energy storage systems and is removed.

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		international safety standard for PCS and may serve as the main basis for compliance. IEC 61439 applies to low voltage switchgear assemblies, not to PCS equipment. Meanwhile, GB/T 34120 is a China-specific standard and is not required within the scope of this project. Therefore, may we only adopt IEC 62109 as the main applicable standard for PCS compliance?	Corrigendum will be issued accordingly.
47	6.2 Technical Specifications 6.2.1.5 PCS Page No.: 261 Submission Requirements Documents & Drawings: • Single-line diagrams and layouts showing PCS, DC busbar, and AC connection to transformer. • Technical specifications of the PCS including protection functions, HMI interface and control modes. • Thermal and environmental performance validation reports. • Standards compliance certificates (IEC 62109, IEC 61439, GB/T34120, or applicable IEC standards). • Pre-charging circuit, DC/AC disconnects, and circuit breaker	We are requesting you to provide a list of documents to be submitted along with the Bid.	As Per Tender Document. Please follow the provision of the Tender Document.

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	schematics. • Operational and protection logic flow diagrams for verification.		
48	6.2 Technical Specifications 6.2.1.6 Bi directional Transformer Page No.: 262 Optional Premium Requirements: • Load losses ≤ 0.5% at rated load • Noise ≤ 65 dB at 1 m • Partial discharge testing per IEC 60270 • Seismic and transport shock resistance • Remote monitoring and diagnostics	We understand that for a 6.25 MVA oil-immersed transformer with CRGO core, the typical load losses at rated load vary depending on the design and efficiency level (IEC/EU Tier 1–Tier 3): Tier 1 (basic): 60–70 kW, 0.96%-1.12% Tier 2 (standard optimisation): 50–60 kW, 0.8%-0.96% Tier 3 (high efficiency): 40–55 kW, 0.64%-0.8% We would like to clarify whether the transformer is still required to be designed using grain-oriented silicon steel laminations as specified in the tender. And are these Optional Premium Requirements mandatory?	Yes – transformer shall use grain-oriented silicon steel (CRGO) as per the provision of the Tender Document The optional premium requirements will be omitted. Corrigendum will be issued accordingly.
49	6.2 Technical Specifications 6.2.1.6 Bi directional Transformer Page No.: 262 Submission Requirements and Notes • Datasheets & Drawings: Full technical drawings including tap changer, busbar system, and core assembly • Factory Acceptance Test (FAT) Reports: • Voltage	We are requesting you to provide a list of documents to be submitted along with the Bid.	As Per Tender Document. Please follow the provision of the Tender Document.

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	regulation and tap changer operation Short-circuit withstand and overload tests • Temperature rise and thermal performance (IEC 60076-2) • Insulation resistance and partial discharge • Performance Details: Efficiency, losses, and noise levels • Safety & Protection: Confirm mechanical/electrical interlocks, grounding, and cooling system • EMC & Surge Protection: Provide details of filters, circuit breakers (CB), and surge protection devices (SPD) installed between PCS and transformer • Manuals: Operational, maintenance procedures, and recommended spares list • Type and Routine Test Reports: Include certified test results for no load and load losses, percentage impedance, temperature rise (heat run), and other tests in accordance with IEC 60076-1.		

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	• Warranty & Performance Guarantees: ü Minimum 12-year service life ü ≤ 2% voltage deviation under rated load ü ≥ 95% efficiency at 75% load		
50	6.2 Technical Specifications 6.2.2 Energy Management System (EMS) Page No.: 264 Submission Requirements and Notes • Complete functional description, system architecture diagrams, and communication diagrams. • Proof of compliance with performance, reliability, and cybersecurity standards. • Details of EMS integration with PCS, BMS, SCADA/DCS, and grid interfaces. • Reference to tested charging/discharging schedule management, SOC maintenance, and peak load regulation capabilities. • Redundancy, fault-tolerance, and database management procedures. • Certificates of compliance with: § Cybersecurity: IEC	We are requesting you to provide a list of documents to be submitted along with the Bid.	As Per Tender Document. Please follow the provision of the Tender Document.

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	62443, ISO/IEC 27001 § Communication: IEC 61850, IEC 60870-5-104, DNP3 § Quality & Safety: ISO 9001, ISO 14001, ISO 45001, IEC 61000 series, IEC 60204 • Detailed HMI and visualization interface screenshots and description. • Optional feature descriptions (predictive maintenance, mobile control).		
51	6.2 Technical Specifications 6.2.3 Thermal Management System (TMS) Page No.: 266 Submission Requirements and Notes • Detailed TMS system layout, including cooling unit specifications, pipeline design, and container integration diagrams. • Functional description of all six operation modes (cooling, heating, self-circulation, standby, fault, dehumidification). • Proof of temperature regulation performance across the full battery	We are requesting you to provide a list of documents to be submitted along with the Bid.	As Per Tender Document. Please follow the provision of the Tender Document.

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	temperature range (0°C–50°C). • Fault detection and alarm reporting logic, integrated with BMS. • Energy efficiency data and expected power consumption under typical operating conditions. • Component datasheets and certificates for compressors, PTC heaters, water pumps, fans, and heat exchangers. • Maintenance and operational manuals including startup, shutdown, and fault handling procedures. • The TMS shall comply with the following international standards and guidelines including IEC 62619: Safety requirements for secondary lithium ion cells and batteries for industrial applications. IEC 62933-2-1: Performance requirements for stationary energy storage systems. UL1973: Standard for batteries for use in stationary and motive power applications. NFPA 855 / IEEE 1679.1: Recommended practices for safe		

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	installation and operation of energy storage systems (fire protection and thermal safety).		
52	6.2.9 Detailed Technical Specifications 1.Cell Sl. No.: 1.19 Page No.: 286 The Battery System shall guarantee ≥70% capacity retention after 12 years of operation OR ≥8760 equivalent full cycles at 80% DoD (2 cycles per day for 12 years), whichever comes first	Is it possible to comply? After 12 years of operation it is unrealistic to maintain battery health greater than 70%.	The requirement is revised to: ≥70% capacity retention after 12 years OR ≥ 8760 equivalent full cycles at 80% DoD (1 cycle per day for 12 years), whichever comes first. Bidders shall comply with the EoL requirements. Corrigendum will be issued accordingly.
53	6.2 Technical Specification Certifications & Standard Page No: 253-279 6.2.9 Detailed Technical Specification Certifications & Standard From Page No: 285 Certifications & Standard Requirement for all the Equipment in 2 section. I. 6.2 Technical Specification 2. 6.2.9 Detailed Technical Specification	Which Certification Requirement are mandatory? In the technical specifications there are mentioned different certifications & standards for each equipment & also in the detailed technical specification chart there are mentioned different certifications & standards for each equipment. The requirements are different for some items. which requirement should we follow.	Bidders shall comply with the certifications listed in Section 6.2.9 (Detailed Technical Specification). Where Section 6.2 cites additional standards beyond Section 6.2.9, they are encouraged but not mandatory for bid compliance.
54	ITT 57 Page No. 62 LCOS Calculation (Usable Energy Degradation Table) Year 1- Usable energy 12MWh	Name of the Prospective Tenderer: SARBS To supply 12 MWh usable energy @80% DoD, Required Approx. 15MWh BESS	The 12,000 kWh (12 MWh) figure in the LCOS example on Page 62 is illustrative only. It is not a requirement for this project. Bidders shall calculate LCOS using their own proposed energy degradation values based on their specific battery configuration and the functional guarantees. The example

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			numbers are not binding.
55	Battery Chemistry Clarification [Section 6.1, Item 1]	Sl. No. 55-75 Name of the Prospective Tenderer: Frisco Green Energy The tender permits 'Lithium Iron Phosphate / NMC rechargeable battery or better.' Given that LFP and NMC have very different thermal characteristics, IEC 62619 test requirements, and performance profiles at the specified ambient temperature of 0-50°C: 1.1 Will bids offering LFP and bids offering NMC be evaluated on the same technical criteria? 1.2 Does BREB have a preferred chemistry given Bangladesh's tropical climate (ambient temperatures regularly exceeding 40°C)? 1.3 What is the minimum cycle life guarantee requirement in terms of cycles at 80% DOD?	1.1 No. Both chemistries are acceptable but will be evaluated against their own performance profiles. LFP and NMC have different thermal characteristics, cycle life, energy density, and safety profiles. Bidders offering NMC must demonstrate compliance with all safety and performance requirements including IEC 62619, UL9540A fire propagation test, and thermal management suitable for 0-50°C ambient. NMC bids will not receive preferential treatment for higher energy density. 1.2 No preferred chemistry. Both LFP and NMC are acceptable. However, the bidder must demonstrate that their proposed chemistry meets all technical requirements including cycle life, thermal derating, fire safety, and 12-year performance warranty at ambient temperatures up to 50°C. 1.3 The requirement is revised to: ≥70% capacity retention after 12 years OR ≥ 8760 equivalent full cycles at 80% DoD (1 cycle per day for 12 years), whichever comes first. Bidders shall comply with the EoL requirements. Corrigendum will be issued accordingly.
56	Thermal Derating Clarification [Section 6.1, Items 10-11]	Item 10 states: 'Systems must maintain full rated output at ≤45°C without thermal derating.' Item 11 states: 'The manufacturer shall specify derating curves vs. temperature.' These requirements appear contradictory: 2.1 If derating curves must be provided, does BREB accept that some derating may occur above 40°C ambient? 2.2 Is the zero-derating requirement at 45°C a hard requirement that will result in	2.1 No. The requirement is full rated power at 45°C without derating. Derating is not permitted at any temperature up to 45°C. Derating curves are required to verify performance above 45°C only. 2.2 Hard requirement. Failure to demonstrate full rated power at 45°C ambient will result in disqualification. 2.3 Ambient air temperature outside the container (external shade temperature). Battery cell temperature shall be maintained at 0-50°C by the Thermal Management System.

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		disqualification, or a design target? 2.3 Does the 45°C limit apply to ambient air temperature or to battery cell temperature?	
57	Black Start Clarification [Section 6.1, Item 43]	Item 43 requires black start process time not more than 1 minute. Please clarify: 3.1 Does the 1-minute timer start from the moment of grid loss detection, or from a manual black start command? 3.2 Does 'black start' mean the BESS powers up and begins supplying the CLB feeders, or that the BESS restores grid voltage on the 11kV bus (including synchronizing with the external 33kV grid)? 3.3 What is the minimum load the BESS must sustain in CLB mode, and for how long?	3.1 It starts from the manual black start command. 3.2 Black start means BESS powers up from battery, energizes its own auxiliary systems, energizes the dedicated 11kV bus, and supplies designated CLB feeders. BESS is not required to restore voltage to the external 33kV grid. 3.3 The bidder shall conduct a site survey at each substation, identify the actual load on designated CLB feeders, and propose a BESS design capable of sustaining that load for the required duration based on battery capacity and 80% DoD.
58	DC Voltage Exposure Limit Clarification [Section 6.1, Items 24-25]	Item 24 requires sectionalizing of strings above 600 VDC. Item 25 states 'more than 60 VDC open-circuit voltage cannot be exposed in BESS.' A 600 VDC string necessarily involves voltages far above 60 VDC: 4.1 Does Item 25 apply only to accessible surfaces (live parts exposed to service personnel), or to the internal system operating voltage? 4.2 Is Item 25 requiring that after sectionalizing, no more than 60 VDC is accessible per section, or that the operating bus voltage is limited to 60 VDC?	4.1 Item 25 applies only to accessible surfaces that service personnel can contact without tools. Internal operating voltage (1000-1500 VDC) is not limited to 60 VDC and shall be enclosed, guarded, or locked. 4.2 After sectionalizing for maintenance, each accessible section shall be ≤60 VDC. Operating bus voltage (1000-1500 VDC) is not limited to 60 VDC. The 600 VDC sectionalizing requirement (Item 24) is for intermediate isolation of string segments during maintenance. The 60 VDC exposure limit (Item 25) applies only after further isolation at module or cell level, or by removing covers with tools. These requirements are sequential, not contradictory.
59	THD-Measurement Point [Section 6.1, Item 7]	Item 7 requires Total Harmonic Distortion <2%. Please clarify: 5.1 Is the 2% THD limit measured at the PCS output terminal (690V AC), at the 11kV POC, or at the 33kV grid	5.1 Measured at the 11 kV Point of Connection (POC). The limit is revised from 2% to 3%. 5.2 Both current THD (THDi) and voltage THD (THDv). 5.3

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		connection point? 5.2 Does this apply to current THD (THDi) or voltage THD (THDv), or both? 5.3 Under what load conditions (% of rated power) must the 2% THD limit be maintained?	At 25% to 100% load: ≤3% for both THDi and THDv. At 10% to 25% load: ≤5%. Below 10% load: no limit. Corrigendum will be issued accordingly.
60	Battery Module Configuration [Section 6.1.2, Item 1.1]	The tender specifies '280Ah or more, Battery Module (Liquid cooling) 104S1P or equivalent and Battery Cluster (Liquid cooling) 416S1P or equivalent.' Modern BESS systems are increasingly using 314Ah and 560Ah+ cells with different S/P configurations. 6.1 How will BREB evaluate 'equivalence'? Is equivalence determined by: (a) energy capacity in MWh, (b) voltage range, (c) nominal cell voltage × Ah, or (d) other criteria? 6.2 Will a configuration using 87S1P (314Ah cells) or other series configurations that achieve equivalent 10 MWh capacity be accepted?	6.1 This is was just indicative. Other ratings may be used for individual cells. 6.2 Yes, provided that the PCS minimum DC voltage of 850 V and ranges are met.
61	SCADA Integration Scope [Section 6.1, Items 12, 40]	The tender requires EMS integration with the existing substation SCADA at each site. 7.1 What SCADA system, protocol (DNP3, IEC 61850, Modbus, SNMP), and vendor is currently installed at each of the four substation sites? 7.2 Will BREB provide existing substation SCADA system specifications and communication interface documentation? 7.3 Is the Contractor required to upgrade or replace the existing SCADA, or only to integrate the new BESS EMS with the existing system?	7.1 The substation does not have any SCADA interface. Contractor shall verify site conditions during site visit. 7.2 Not applicable 7.3 It is required to build a local SCADA system according to the Technical Specifications provided in the document under Section 6.1 Clause 9 SCADA. (Page 307)
62	Warranty Terms	Item 14 requires '5 years	8.1

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<tr><td></td><td>[Section 6.1, Item 14]</td><td>warranty for all parts.' International best practice for utility-scale BESS is a 10-year warranty with minimum 80% SOH at end of warranty.
8.1 Does the 5-year warranty cover the battery cells' capacity retention, or only hardware defects?
8.2 What minimum SOH must the batteries maintain at the end of the 5-year warranty period?
8.3 Does the 2-year warranty period stated in the Scope of Works (Section 6.1 header) refer to the Defect Liability Period (DLP) under GCC, while the 5-year warranty in Item 14 is separate?</td><td>The 5-year warranty covers everything. The whole scope of works.
8.2
There is no specific SOH requirement at year 5.
8.3
The DLP is 5 years.</td></tr>
<tr><td>63</td><td>O&M Contract Terms [Price Schedule-7]</td><td>The tender includes an O&M Contract for BESS operations at four sites (Price Schedule-7).
9.1 What is the duration of the O&M contract period?
9.2 Will the O&M contract be awarded to the same contractor as the EPC contract, or tendered separately?
9.3 What are the minimum response time requirements for corrective maintenance under the O&M contract?
9.4 Is the O&M contract performance-based (linked to BESS availability) or time-based?</td><td>9.1
7 years (years 6-12 after DLP)
9.2
O&M will be a separate contract with the same EPC contract subject to BREB's decision
9.3
This shall be defined in more detailed later, but 8h is envisaged at this stage.
9.4
Performance-based
9.5
Price Schedule- 7 has been revised as follows:
Schedule No. 7 Operation & Maintenance Service
<table>
<tr><th>Item</th><th>Description</th><th>Unit</th><th>Quantity</th><th>Unit Price (Local Currency) BDT</th><th>Total Price</th></tr>
<tr><td>1.0</td><td colspan="5">Operation & Maintenance (For years 6-12)</td></tr>
<tr><td></td><td>Operation & Maintenance of the Battery Energy Storage System (BESS) for the Year ,including 24/7 operation support and SCADA/EMS</td><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
</table>

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					monitoring; routine, preventive, predictive, and corrective maintenance, including battery checks such as State of Health (SoH), Depth of Discharge (DoD), and other system inspections; system performance monitoring and degradation tracking to ensure ≥98% availability; troubleshooting; software and firmware updates for BMS, PCS, and EMS; supply, storage, and replacement of consumables and specified spare parts; inspection and compliance of fire protection systems; adherence to national grid codes, safety, and environmental regulations; training of BREB/PBS personnel; preparation and submission of monthly and ad-hoc operational, maintenance, performance, and incident reports; and provision of documentation and audit support to the Employer; all in accordance with OEM recommendations, Technical Specifications, and Contract					

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	Documents.					
1.1	Year 6: Operation & Maintenance (including, but not limited to, the above-mentioned activities/services)	site	4			
1.2	Year 7: Operation & Maintenance (including, but not limited to, the above-mentioned activities/services)	site	4			
1.3	Year 8: Operation & Maintenance (including, but not limited to, the above-mentioned activities/services)	site	4			
1.4	Year 9: Operation & Maintenance (including, but not limited to, the above-mentioned activities/services)	site	4			
1.5	Year 10: Operation & Maintenance (including, but not limited to, the above-mentioned activities/services)	site	4			
1.6	Year 11: Operation & Maintenance (including, but not limited to, the above-mentioned activities/services)	site	4			
1.7	Year 12: Operation & Maintenance (including, but not limited to, the above-mentioned activities/services)	site	4			
	Schedule 7: Total (O&M: Year 6-12)					

(must be filled)

Note: 1. Create and use as many columns for Unit Price and Total Price as there are currencies;

2. *Inclusive all Taxes;*

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			<table><tr><td>Name:</td><td>*[insert full name of signatory]*</td><td>*Signature with Date and Seal*</td></tr><tr><td>In the capacity of:</td><td>*[insert designation of signatory]*</td><td>*[Sign]*</td></tr><tr><td colspan="3">Duly authorized to sign the Tender for and on behalf of the Tenderer</td></tr></table> Corrigendum will be issued accordingly.
64	Experience Criteria Equivalence [TDS ITT 13.1(b)]	The experience criteria accepts '33/11kV substation with SCADA/integration' or '10MWp+ solar PV project' as equivalent to BESS experience. Given that this is a specialized BESS procurement. 10.1 Will a tenderer with only substation or solar PV experience (no BESS-specific experience) be evaluated equally with a tenderer who has completed multiple utility-scale BESS projects? 10.2 Is there any technical scoring premium for BESS-specific experience vs. the alternative qualifying experience? 10.3 What documentation is required to demonstrate 'similar nature and complexity' for a substation project qualifying under the BESS tender criteria?	10.1 Yes, no priority will be given 10.2 No technical scoring premium for BESS specific experience 10.3 The following documents are required: • End user certificate on client letterhead in English, including full contact details • Contract copy showing scope, value (≥USD 5.6 million), and completion • Proof of at least 1 year of operation etc. As per the provision of the Tender Document.
65	Battery Chemistry	Tender permits both LFP AND NMC ("Lithium Iron Phosphate/NMC or better"). IEC 62619 and IEC 62933-2-1 have distinct test regimes for each chemistry. Mixing alternatives without chemistry-specific type test certificates creates compliance ambiguity. The standard should specify LFP only for tropical climate (0-50°C ambient) given NMC's higher thermal risk above 40°C. Request clarification on accepted chemistry and whether dual-chemistry bids will be evaluated equally.	See the answer to query no. 54

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66	Temperature Derating	Tender requires "full rated output at 45°C" without thermal derating (Item 10) but also states ambient range of 0-50°C. IEC 62933-2-1 and manufacturer data consistently show LFP systems derate above 40°C. Requiring zero derating at 45°C is technically inconsistent with industry norms. 2.1 The clause "Systems must maintain full rated output at 45°C without thermal derating" conflicts with the requirement to "specify derating curves vs. temperature." 2.2 If derating curves are required, zero derating at 45°C cannot simultaneously be mandated. Clarification needed.	See the answer to query no. 55
67	DC Voltage Safety — 60V	Item 25 states "More than 60 VDC open-circuit voltage cannot be exposed in the BESS." However, Item 24 allows strings up to 600 VDC (sectionalizing requirement). These are contradictory — a 600V DC string cannot simultaneously expose no more than 60V to personnel. IEC 62619 addresses this through insulation and physical access controls, not an absolute voltage cap. 3.1 Item 25 likely refers to accessible/exposed voltage after sectionalizing. The tender language is ambiguous. 3.2 Per IEC 62619, the requirement should be that accessible live parts are de-energized or insulated, not that system voltage is limited to 60V. Clarification required on interpretation.	See the answer to query no. 57
68	Black Start Requirement	Item 43 requires black start within 1 minute. IEEE 1547-2018 does not mandate a specific black start time.	See the answer to query no. 06 and 56

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		Utility-scale BESS black start times of 1 minute are achievable but require grid-forming PCS with pre-charged DC bus. The tender does not specify whether this applies to the BESS system starting the grid or just BESS self-energizing. 4.1 Define whether the 1-minute black start refers to BESS becoming ready to export power after grid loss, or BESS providing island-mode power to designated feeders. These have very different technical requirements. Clarification critical for PCS design.	
69	Grid Interconnection Standard — Missing IEC 62933-5-2	The tender cites IEC, UL, IEEE 1547-2018, UN 38.3, and ISO (Item 42) but does not explicitly require IEC 62933-5-2 (Safety for grid-integrated ESS). This standard is now the primary IEC grid integration standard for utility-scale BESS and supersedes older references for grid interaction safety. GAP: 5.1 IEC 62933-5-2 should be explicitly cited for grid-side safety requirements. 5.2 The tender's reference to "IEC" standards generically is insufficient for procurement compliance. Recommend asking BREB to specify which IEC 62933 sub-parts are required.	The referenced certifications and standards in Item 42 are general compliance requirements. Detailed applicable IEC, UL, and other technical standards for the BESS are specified separately under Detailed Technical Specifications. IEC 62933-5-2 is already included under the applicable IEC standards for safety requirements of grid-integrated electrochemical energy storage systems.
70	THD Requirement — 2% vs. Industry Standard	Item 7 requires Total Harmonic Distortion A 2% THD current limit at the PCS output is more stringent than most IEC standards require. STRICTER THAN STANDARD: 6.1 While achievable with	See the answer to query no. 58

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		modern PCS, confirm whether the 2% THD applies at the PCS terminals or at the 11kV POC (Point of Connection). 6.2 Standards measure THD at PCC, not equipment output. This significantly affects PCS filter design costs.	
71	Warranty — 5 Years "All Parts"	Item 14 requires "5 years warranty for all parts." IEC 62933 does not specify warranty duration. However, the industry standard for utility-scale BESS is typically 10-year system warranty with 80% capacity retention guarantee. A 5-year warranty for battery cells specifically may result in suppliers using lower-quality cells. BELOW BEST PRACTICE: 7.1 Consider requesting 10-year system warranty with minimum 80% State of Health (SOH) guarantee at end of warranty period, per IEC 62933-3-1 performance standards. Five years is below what leading vendors offer as standard.	It will be unchanged and as per the provision of the Tender Document. Please follow the provision of the Tender Document.
72	Battery Module Configuration — Prescriptive Specification	Items 1.1 specify "104S1P or equivalent" and "416S1P or equivalent" module/cluster configurations. This level of prescriptiveness in a tender document is unusual and may unintentionally restrict newer cell formats (e.g., 314Ah, 587Ah cells) that have different S/P configurations for equivalent energy capacity. RESTRICTIVE: 8.1 The "or equivalent" qualifier helps, but the specific 104S1P configuration references 280Ah cells. 8.2 Vendors with newer 314Ah or 560Ah cells achieving 10MWh in different	See the answer to query no. 59

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		configurations may be incorrectly evaluated. Clarify that equivalence is based on energy capacity and safety performance, not cell configuration.	
73	Transformer Rating — 6.25 MVA Mismatch	Item 2.3 specifies a 6.25 MVA bi-directional transformer (11kV/0.69kV). The BESS power rating is 5MW. A 6.25 MVA transformer provides a 1.25 oversize factor (25%). While not wrong, IEC 60076 (power transformer standard) does not require this specific oversize standard. The transformer rating should be justified based on reactive power requirements and loss optimization. 9.1 Why 6.25 MVA for a 5MW system? 9.2 Confirm whether the additional 1.25 MVA is for reactive power (VAR) capacity at the required >90% power factor, or for future expansion. This has cost implications.	See the answer to query no. 27
74	Fire Suppression — Perfluorohexanone	Item 1.9 specifies Perfluorohexanone (FK-5-1-12) fire suppression, which is compliant with NFPA 855 and accepted internationally. However, the EU is restricting PFAS chemicals (including FK-5-1-12) from 2025 onwards. Bangladesh has no equivalent restriction currently, but international suppliers may face supply chain issues. 10.1 While compliant today, confirm that the specified suppression agent will remain commercially available in Bangladesh for the 12-year equipment life. 10.2 Alternatively, request water mist or aerosol systems as an accepted equivalent.	Alternative fire suppression agents are accepted including water mist, inert gases (IG-55, IG-541), and dry powder. Bidder shall provide third-party test reports, agent quantity calculation per NFPA 2001, and supply chain assurance for 12 years. BREB does not restrict FK-5-1-12 unless Bangladesh adopts equivalent regulations during the project lifecycle.
75	BPDB Solar Tender	The three BPDB tender	Raised BPDB solar tender issue is irrelevant to this tender.

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	vs. BREB ESS Tender — Scope Divergence	documents (Docs 1-3) cover solar PV grid-connected power plants (7.6 MWp, 50 MWp, 20 MWp) by BPDB. The BREB tender (Doc 4) covers grid-scale BESS at distribution substations by BREB. These are separate procurement packages from different entities (BPDB vs. BREB) with different technical, financial, and experience requirements. ORGANIZATIONAL NOTE: 11.1 Bidding on both BPDB solar tenders and the BREB BESS tender is possible, but they require separate qualifications and organizations. 11.2 Solar PV EPC experience does qualify under the BREB BESS tender's "similar nature" experience criteria (10MWp minimum). 11.3 However, BESS-specific experience is separately required.	For BESS Project, please follow the provision provided in Tender Document ITT 13.1 (b).
76	Section 1 Instruction to Tenderers (ITT) 56. Identifying Significantly Low-priced Tenders (SLT)	Sl. No. 76-81 Name of the Prospective Tenderer: Reveric In the Tender Document, Section-1, Clause No. 56 refers to the identification of Significantly Low-priced Tenders (SLT), along with the associated formula and related provisions. However, as per our understanding, this clause is generally applicable to National Competitive Tendering (NCT) and not to International Competitive Tendering (ICT). In this regard, we kindly request you to review the applicability of this clause for this tender and provide clarification accordingly.	See the answer to query no. 12
77	Section 2 Tender Data Sheet	In the Tender Document, Section-2, Clause No. 57 Price	See the answer to query no. 12

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	ITT 57 Price Comparison	Comparison along with the associated formula and related provisions. However, as per our understanding, this clause is generally applicable to National Competitive Tendering (NCT) and not to International Competitive Tendering (ICT). In this regard, we kindly request you to review the applicability of this clause for this tender and provide clarification accordingly.	
78	Section 2 Tender Data Sheet ITT 57 Price Comparison	Please clarify the requirement of "3rd party verification" mentioned in ITT 57 under Price Comparison.	"Third party verification" is removed and replaced by "Values must be supported by evidences and/or statements from the manufacturers" Corrigendum will be issued accordingly.
79	Schedule of Rates and Prices Schedule No. 1 & Schedule No. 2 and Guaranteed Technical Particulars-9.3 (SCADA Integration for BESS and Substation Interface)	Price Schedule- 12.1 Supply of SCADA system for real time monitoring and control, which shall incorporate the existing substation's components for complete monitoring and control of entire Substation & BESS system and Integration with power grid system. GTP 9.3- A dedicated SCADA system shall be implemented for the Battery Energy Storage System (BESS) and the newly created 11KV bus section, which will serve two selected feeders of the substation. Although the existing substation does not currently have a SCADA interface, the contractor shall ensure that the new bus section and all connected equipment are fully SCADA controlled. As per bidders understanding, the SCADA system shall be implemented for the BESS & newly created 11kV bus section only. Please Confirm whether bidders understanding is correct?	Yes, the SCADA system shall be implemented for the BESS & newly created 11kV bus section according to Detailed Technical Specification 9 SCADA (Page 307) Please follow the provision of the Tender Document.
80	Schedules of Rates	3. Supply of Energy	May be supplied as separate systems or as an integrated

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	and Prices Schedule No. 1 & Schedule No. 2 (Serial 3 & Serial 12)	Management System (EMS) with complete solution for integration with existing substation and BESS 12. SCADA Workstation & Software and modification As EMS and SCADA are mentioned separately in the Price Schedule. Please confirm whether EMS and SCADA shall be supplied as separate systems or as an integrated solution.	solution. All relevant requirements continue to apply
81	General Tender Lot No.	In the tender document, the first page mentions Tender Lot No.: **MCEP/BREB/DMD-W-392.** However, in Section 2, Tender Data Sheet (ITT 1.1), it is mentioned as: **Single Lot: MCEP/BREB/DMD-W-392** Kindly confirm which Tender Lot No. should be followed for bid submission and all related documents.	**Single Lot: MCEP/BREB/DMD-W-392** The above Tender Lot No. shall be followed.
82	Page Number: P264 Clause: Alarms & Reporting: Notifications via email, SMS, or other channels.	Sl. No. 82-85 Name of the Prospective Tenderer: ZTT The EMS normally works in local area network, it is cyber security, so it will be better not via email or SMS to outer networks.	The requirement for notifications via email, SMS, or other channels shall remain as specified. The EMS must be capable of sending notifications through email, SMS, or other channels as required by the Employer during operation.
83	Page Number: P133 Clause: GCC 63.4 The Performance Security shall not be reduced on the date of the Operational Acceptance and shall remain valid for its full value until completion of the Defects Liability Period of sixty (60) months	Please confirm only 10% Performance Security for DL period is acceptable.	See the answer to query no. 34

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	plus twenty-eight (28) days. Page Number: P141 Clause: 10% (Ten Percent) money shall be retained for defect liability period either from retention money or from PG. It might be from both sources as per decision of employer's decision.		
84	Page Number: P208 Clause: The Tender shall copy in the left column of the table below, the identification of each functional guarantee required in the Specification and stated by the Procuring Entity in ITT 24(n) and in the right column, provide the corresponding value for each functional guarantee of the proposed plant and equipment.	We did not find the ITT24(n), please provide the required functional guarantee.	ITT 24(n) to be replaced with ITT 29 (Documents Establishing the Eligibility and Conformity of Plant and Services) **Corrigendum will be issued accordingly.**
85	Last date for Submission of Tender & Time 04-06-2026 up to 12.00 noon (BST)	Because of Labor's holiday in China (1st May to 5th May), we kindly ask two weeks extension of tender last submission date, so that we can finished the site visit, tender security and documents preparation.	Informed letter will be provided.
86	Total Harmonic Distortion: < 2% to maintain grid code [PCS]	Sl. No. 86-92 Name of the Prospective Tenderer: ERA Construction The THD of the Linyang's	See the answer to query no. 58

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		BESS system <3%. The BESS includes the battery container, PCS and transformer.	
87	Operating ambient: 0~50°C, Storage Temperature up to 65°C	The storage ambient temperature of the battery container shall be -40~50°C. If stored in a high-temperature environment of 65°C, it will easily cause accelerated attenuation of battery capacity, increase in internal resistance, and deterioration of cell consistency. It may also lead to cell bulging and liquid leakage, accelerated aging of electrical components, and significantly raise the safety risk of battery thermal runaway. Therefore, storage in over-temperature environments is not recommended. Measures such as building sunshade canopies and installing cooling fans can be adopted to lower the ambient temperature around the battery container and meet the storage requirements. The storage temperature range of the MV Station is -40~70°C. Nevertheless, long-term storage at 65°C is still not recommended. Sunshade canopies, cooling fans and other cooling measures can be used to reduce the ambient temperature around the medium-voltage all-in-one unit, so as to avoid damage to the equipment caused by high temperature.	The 65°C storage temperature is a maximum withstand limit, not a recommended storage condition. The requirement means that the BESS components shall be capable of withstanding short-term exposure to 65°C during transportation, temporary holding, or emergency conditions without permanent damage. It does not mean that the system shall be stored continuously at 65°C.
88	Certifications/Standard: IEC, UL, IEEE 1547 2018, UN 38.3, ISO	The IEEE 1547 certification is currently in progress, and it is expected to be completed with the certificate obtained in Q4 this year.	The bidder may submit a declaration of commitment to obtain IEEE 1547-2018 certification prior to equipment delivery. However, failure to provide the certificate before shipment will result in rejection of the equipment. BREB reserves the right to disqualify bids relying on provisional certifications.
89	Supply of Battery Container, Standard 20 feet Container, IP 65 or higher,	The protection grade of the battery container is IP55, and it cannot meet IP65 requirements.	See the answer to query no. 04

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	RAL7035, outdoor type or available size as per the site condition		
90	Supply of Containerized solution with PCS and bi-directional transformers, outdoor type, IP65 or better, Color RAL7035, Standard 40 feet container or available size as per the site condition.	The protection grade of the MV Station is IP54, and it cannot meet IP65 requirements.	See the reply to query no. 39
91	Seamless transition between grid-connected and island modes	The response time from main power outage to the BESS starting to supply power to the load is at the millisecond level.	See the reply to query no. 40
92	Noise <65dB at 1m	The noise level of the battery container at 1 meter distance is less than 75 dB. The noise level of the MV Station at 1 meter distance is less than 75 dB.	It shall be as per the Tender Document provision.
93	LCOS Formula	Clarification regarding LCOS	The proposed LCOS calculation shall be carried out as follows: LCOS Formula: LCOS = (CAPEX + OPEX) / Yield CAPEX refers to the total EPC turnkey price offered by the Tenderer (Schedule No. 5). OPEX equals 2% of the CAPEX price. Yield is the sum of Discounted Energy from Year 1 to Year 12 and is calculated by taking the usable energy delivered per year (E_t) and discounting each year at 10 percent using the formula = $E_t/(1.1)^t$ • The Tenderer shall a usable energy degradation table covering Years 1 to 12, values must be supported by evidences and/or statements from the manufacturers. The Tenderer may follow the example calculation table provided under the LCOS section of the Tender Document for submission of the year-wise data • The Tender with the lowest evaluated cost applying the

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			LCOS formula shall be ranked as the 1st responsive Tenderer, and the subsequent Tenderers shall be ranked accordingly.
94	1.25 Modes of Operation The PCS shall have a continuous active power rating equal to the BESS nominal power (5 MW) and shall support grid-following operation. The BESS system shall provide voltage support and frequency response in grid-connected mode, and Critical Load Backup (CLB) to designated feeders during grid outages. Page 295	We believe there is a typographical error in this clause. It states the PCS "shall support grid-following operation," but we understand the requirement is for the PCS to support "grid-forming" operations. Please Clarify.	The sentence is revised as the following: "The PCS shall have a continuous active power rating equal to the BESS nominal power (5 MW) and shall support grid-forming operation. The BESS system shall provide voltage support and frequency response in grid-connected mode, and Critical Load Backup (CLB) to designated feeders during grid outages." Corrigendum will be issued accordingly.
95	The BESS and all associated systems shall comply with applicable international and local standards, including but not limited to-IEC: 60529 (IP rating), 60255 (protection relays), 62109-1/2 (PCS safety), 62933-2-1 (stationary ESS), 61850 (communication), 62305 (lightning), 60071-1/2 (insulation), 60364-5-54 (earthing), 62619 (battery safety); IEEE: 1547 (interconnection),	IEC 62109-1/2, serving as the international safety standard for PV inverters, is primarily applied to pure photovoltaic systems. In contrast, IEC 62477 is more universally applicable to power electronic converters. Therefore, we recommend replacing the IEC 62109 certification requirement here with IEC 62477	The sentence is revised as: "The BESS and all associated systems shall comply with applicable international and local standards, including but not limited to-IEC: 60529 (IP rating), 60255 (protection relays), 62477 (PCS safety), 62933-2-1 (stationary ESS), 61850 (communication), 62305 (lightning), 60071-1/2 (insulation), 60364-5-54 (earthing), 62619 (battery safety); IEEE: 1547 (interconnection), 1679.1 (BESS fire protection), 2030.11 (DER control), C37.04 (switchgear ratings); UL / NFPA: UL 9540 / 9540A (ESS safety), UL 1973 (batteries), NFPA 72 (fire alarms), NFPA 855 (ESS installation)." Corrigendum will be issued accordingly.

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	1679.1 (BESS fire protection), 2030.11 (DER control), C37.04 (switchgear ratings); UL / NFPA: UL 9540 / 9540A (ESS safety), UL 1973 (batteries), NFPA 72 (fire alarms), NFPA 855 (ESS installation). Page 254		
96	--------- months from the effective date	What time does the content to be filled refer to? Is it the equipment delivery cycle or the time when the project is finally commissioned?	Please refer to Section 4. Particular Conditions of Contract GCC clause 29.1
97	6.6 Supplementary Information vii (PG5A-393): Clearly states that "delays caused by floods, hurricanes, high water levels, road destruction, etc. will not be granted as a basis for extension of the project schedule or increase in costs", without distinguishing between force majeure and the responsibility of the owner.	Force majeure factors shall be excluded from the project duration.	Please refer to Section-III: General Conditions of Contract, E. Risk Distribution Clause 56 Force Majeure
98	During the sixty (60) month defect liability period and warranty period, the contractor shall provide comprehensive professional support services for the battery energy storage system	During the warranty period, we provide replacement parts for damage caused by equipment issues. Please clarify whether the comprehensive support services during the warranty period refer to O&M support; if so, is the cost already included in the warranty price?	Please refer to Section 2. Tender Data Sheet Clause ITT 63 and Section 4. Particular Conditions of Contract, Clause GCC 45.10 Please follow the provisions of the Tender Document.

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	(BESS).		
99	6.1.1 General PCS Power: 5MW at AC side and adjustable {PCS} and must have grid forming function	We understand that this project requires true grid-forming technology. However, in the market, many manufacturers merely claim to have this capability. To objectively verify true grid-forming functionality, as required by other utilities, we propose that bidders should provide the following evidence: 1.A third-party test report for the PCS demonstrating active RoCoF response, active phase jump power, multiple fault ride-through, etc. 2.An end-user certificate confirming the field application of the grid-forming technology. 3.A third-party test report confirming that under off-grid conditions, the PCS does not trip during a manual three-phase, phase-to-phase short-circuit test. 4.A PSSE model of the PCS specifically for grid-forming mode. Please confirm that BREB requires true grid-forming technology and that the above documentary evidence is to be provided. hat BREB wants a true grid forming technology and the above documents are needed to be provided	BREB requires true grid-forming technology for the PCS. However, the documentary evidence proposed by the bidder is not required at the bid submission stage.
100	Letter of Authorization	Corresponding Letter of Authorization is numbered as PG5A-1A but in forms it is PG5A-1c	Please follow the heading "Letter of Authorization" The typo error is corrected to PG5A-1c.
101	ITT 23.2 (f)	In the case of JVCA please confirm whether just one partner or all partner should have the ABC license. If only one partner needs to hold such license, could equivalent certification be applicable.	Only one partner is acceptable to have the ABC License. Yes, equivalent certifications are acceptable as per the provision of the tender document.

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102	Switchgear	Please provide detailed information of the existing 11kV switchgears at the four substation but not limited to manufacturer, model, rated busbar current, circuit specifications, cabinet breaker dimensions, protection IED model and communication protocols	The tenderer is requested to conduct site visit as per the Tender document.

Therefore, Tenderers' action with respect to the above would be highly appreciated.

(Mohammad Ali)
Project Director

Copy for information and necessary action to:

1. Chief Engineer (Project), BREB, Dhaka.
2. PS to Chairman, BREB, Dhaka.
3. PS to Member (D & O), BREB, Dhaka.
4. Prospective Tenderer M/S.....