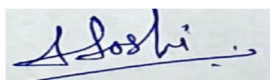


Pre-Bid Meeting - Green H2 Pilot (DoE, MoENR) - 2026/07/17 (10:30 AM-12:15PM)

Sl. No	Name	Agency	Signature
1	Jamyang Tempa	DoE	
2	Dechen Dema	DoE	
3	Tshering Tashi	DoE	
4			
5			
6			
7			

The Project Manager (Mr.Jamyang) welcomed all the Bidders and thanked them for their interest in the 1 MW Green Hydrogen Pilot Project, one of the first green hydrogen initiatives in Bhutan. The project team, composed of officials from the Department of Energy, including Mrs. Dechen Dema, and Mr. Tshering Tashi, was introduced to the Bidders.

The Project Manager expressed appreciation to the Government of India for its financial support under the Project Tied Assistance Programme, which has enabled the implementation of the pilot project. It was further emphasized that the Department seeks not only a competent EPC contractor but also a long-term partner capable of supporting the growth and scale-up of Bhutan's green hydrogen sector.

Given the substantial number of queries received, no formal presentation was delivered during the meeting. Instead, the session was dedicated to addressing bidder queries and clarifications. The Record of Discussion along with the Addendum will be shared as per the provision of Procurement Rules and Regulations, 2025. Additional questions raised during the meeting would be reviewed and responded to through appropriate communication channels such as email and MoENR's website.

Queries and Responses

No.	Question	Reason	PA Response
SECTION A: TECHNICAL CLARIFICATIONS			
1	Please confirm the guaranteed daily and annual hydrogen production capacity.	Required to verify electrolyzer sizing, hydrogen storage capacity, utility consumption calculations, and performance guarantee commitments. This is the fundamental basis for the entire plant design.	- As per minimum specification criteria in the ERQ.
2	Please confirm the intended plant operating philosophy (24×7 continuous operation, renewable-following mode, daytime only operation, etc.).	Operating philosophy directly affects equipment sizing, electrical load profile, hydrogen storage capacity, compressor duty cycle, and overall operating cost. This is essential for selecting the appropriate technology and sizing all systems.	- Annual operating hours should be $\geq$ 8000 hours/annum.
3	Please define the Performance Guarantee (PG) acceptance criteria and availability calculation methodology in detail.	Necessary to understand contractual obligations, plant acceptance requirements, and the exact methodology for calculating plant availability ($\geq 95\%$ as specified). This impacts the design philosophy and risk assessment.	- The 95% PLF is considered without any pre-planned maintenance, however it needs to fulfill the minimum operational hours. - PG Acceptance criteria will be as per the conditions set in the ERQ.
4	Please specify the guaranteed hydrogen purity, moisture limit, oxygen content, and dew point requirements. Also specify the required detection limits for all impurities (CO, CO ₂ , total hydrocarbons, formaldehyde, etc.) as per SAE J2719 / ISO 14687.	Required for selecting the appropriate purification and drying systems, Gas Chromatograph/Spectrometer technology, and ensuring compliance with fuel cell vehicle standards. The current document references standards but does not specify detection limits.	- Should be as per the fuel cell vehicles standard and must fulfill all the requirements in SAE J2719/ ISO 14687.
5	Please provide the complete raw water quality analysis report (Annexure I) including all parameters mentioned in the document (pH, hardness, TDS, nitrates, heavy metals, coliform,	Essential for designing the water treatment plant and selecting suitable treatment technology (Deionization/Non-Thermal Forward Osmosis/Reverse Osmosis). The current document provides a table format but the actual	- It is the bidder's responsibility and to be taken up during site visit at your own cost.

	etc.).	values are not filled.	
6	Please confirm the guaranteed raw water availability throughout the year and clarify who is responsible for obtaining water abstraction approvals and permits.	Required to ensure uninterrupted plant operation during dry seasons and clarify EPC responsibilities regarding statutory approvals. The river is described as \"perennial\" but guaranteed minimum flow is not specified.	- The river is perennial and the minimum flow will be available throughout the year. - All the necessary clearances need to be processed during the engineering design phase; however, DoE will also facilitate the acquisition of those clearances at the same time. - There are minimal application and permit fees for environmental clearance.
7	Please provide complete incoming electrical system details including:	Necessary for electrical design, protection coordination, transformer	- To be taken up during detailed engineering design.

No.	Question	Reason	
SECTION A: TECHNICAL CLARIFICATIONS			
	- Exact voltage level at the connection point - Available fault level (MVA/kA) - Frequency and voltage tolerance - Earthing system details - 33 kV network information (distance from substation, feeder type) - Whether a dedicated feeder is required	sizing, switchgear selection, and grid integration. Without this data, the electrical design is incomplete and may lead to costly rework.	
8	Please provide battery limit drawings showing the exact project boundary, utility interface points (power, water, communication), and the scope demarcation between Bidder and DoE	Required to clearly define EPC scope, interface responsibilities, and avoid scope ambiguity. The current documents mention interfaces but do not provide detailed drawings.	- To be taken up during detailed engineering design.

	responsibilities.		
9	Please provide the complete geotechnical investigation report, topographical survey, soil bearing capacity data, settlement characteristics, groundwater level, seismic zone and zone factor, basic wind speed, and flood level data.	Essential for civil, structural, foundation, grading, and drainage design. Without this data, civil works cannot be accurately designed or costed. The site elevation variation of approximately 2 meters also requires detailed topographical data.	- To be taken up during detailed engineering design.
10	Please confirm the expected number of Fuel Cell Electric Buses (FCEBs) to be refueled per day, the fueling schedule, and the required daily hydrogen dispensing quantity.	Required for sizing storage, compressor duty cycle, dispenser capacity, and overall plant capacity. The document specifies 2 FCEBs but does not specify daily usage pattern or required refueling frequency.	- Refer ERQ
11	Should the design incorporate provisions for future expansion of the hydrogen production capacity? If so, to what capacity (e.g., 2 MW, 5 MW)? What specific provisions are required (space, utilities, pipe racks, cable trays, control system capacity)?	The design philosophy mentions \"provide adequate provisions for future expansion and modifications\" but does not specify the extent. This affects civil layouts, utility sizing, overall plant arrangement, and initial investment decisions.	- For the bidding evaluation, it will be as per the 1 MW capacity but any expansion recommendations during detailed engineering design will be dependent upon accommodation of 1 MW pilot plant.
12	Is there any preference for PEM over Alkaline (or vice versa) based on the project's objectives (demonstration, efficiency, operational flexibility, maintenance requirements)? Will both technologies be evaluated equally?	The technologies have different CAPEX/OPEX profiles, operational requirements, maintenance needs, and stack life characteristics. Understanding the client's preference (if any) is essential for selecting the optimal technology and preparing a competitive bid.	- There is no preference with technology. - Technically both needs to fulfill the minimum technical criteria as specified in the ERQ and will be evaluated as per the technical evaluation criteria set. However, financial bids will be evaluated differently.
13	Can you provide detailed technical datasheets for major equipment items, including: - Compressor performance curves (flow vs. pressure, turndown ratio)	The current technical specifications are high-level and lack critical design data needed for a firm quotation, accurate equipment selection, and cost estimation. Without these details, the bidder is forced to make	- The Technical Specs need to be supplied by the bidder based on their equipment but it should follow the minimum technical standards and criteria set up in the ERQ.

No.	Question	Reason	
SECTION A: TECHNICAL CLARIFICATIONS			
	- Pump curves (head vs. flow) for all pumps - Material of Construction (MOC) for all pressure vessels and tanks - Motor ratings and enclosure types - Control valve sizing data (Cv values, pressure drops) - Electrolyzer stack degradation profile and replacement procedure - Heat exchanger thermal design data	assumptions that may not align with client expectations.	
14	The document allows Type 1, Type 3, or Type 4 cylinders for hydrogen storage. Is there any preference based on the project's demonstration nature? Are there any specific requirements regarding cylinder diameter (not exceeding 80 cm with PESO approval)?	Different cylinder types have different costs, weight, maintenance requirements, and safety characteristics. Understanding preferences helps in selecting the most suitable option.	- We encourage the best for hydrogen storage but it should fulfill the minimum requirement in the ERQ. - Also, must fulfill the PESO approval
15	Can you provide a template or format for the spare parts and consumables list? Should the list include only critical/high-value items or all items down to bolts and gaskets?	The document requires the Bidder to provide a \"complete list\" but does not specify the level of detail required. This ambiguity could lead to inadequate or excessive spares provision, affecting the AMC pricing and plant availability during the DLP/AMC period.	- We don't have the list but we request you to include only critical/high-value items but till the DLP everything needs to be covered.
16	Is net metering or a specific feed-in tariff arrangement required for the grid-connected electrolyzer? What are the Bhutan Power Corporation Limited (BPC) requirements for power export (if any)? Are there any specific metering requirements (accuracy class, communication protocol)?	The document mentions \"net metering\" but does not provide details of the arrangement. This impacts the electrical design, protection philosophy, and commercial viability of the project.	- All HV and LV design and metering shall be designed as per the Bhutan Grid Code Regulations 2024 and other relevant regulations set up by DoE/BPC (ERQ 5.1.3.6). - Net metering is irrelevant.

17	Please provide more detailed specifications for hot and cold insulation requirements, including insulation thickness, thermal conductivity requirements, and specific materials to be used for different temperature ranges.	The document provides general requirements but lacks specific data needed for accurate design and costing. Insulation is critical for energy efficiency and personnel safety in hydrogen systems.	- This needs to be taken up during the detailed engineering design phase.
18	Please provide Hazardous Area Classification (HAC) drawings or the basis for HAC. Has HAZID already been completed? If yes, can you share the findings?	Required for safety engineering, selection of appropriate equipment (flameproof/explosion-proof), electrical design, and avoiding duplicate studies. This also impacts the schedule and cost of safety compliance.	- No, Bidders will need to conduct those studies as part of the contract.
SECTION B: COMMERCIAL / CONTRACTUAL CLARIFICATIONS			
19	Please confirm the correct and legally binding Intended Completion Date.	This is a fundamental contractual term. The conflicting dates create	

No.	Question	Reason	
SECTION A: TECHNICAL CLARIFICATIONS			
	The BDS states 24 months, while the SCC states 26 months after signing of the contract.	significant risk of misunderstanding and potential claims regarding schedule, liquidated damages, resource planning, and performance guarantees. This MUST be clarified before bid submission.	-Addendum: The actual project schedule will be 26 months after signing of the contract.
20	Please state the rate per day for Liquidated Damages as mentioned in GCC Clause 46.1. Is it a fixed amount per day or a percentage of the Contract Price per day?	The contract allows for LD deductions but does not specify the daily rate. Without this information, it is impossible to accurately assess the financial risk of schedule delays. This directly impacts risk assessment, contingency planning, and pricing.	- Refer SCC
21	Please provide the details of the milestone agreement mentioned in SCC Clause 22.7. What are the specific milestones, completion dates for each	The document states that \"failure to achieve the stipulated milestones as outlined in the SCC shall constitute sufficient grounds for determining a fundamental breach of contract,\" but	- The tentative EPC schedules, milestones and payment structure is mentioned in the ERQ. While the

	milestone, and what constitutes a \"fundamental breach\" with respect to these milestones?	the milestones are not defined. This creates significant contractual and schedule risk.	milestone will remain the same, the bidders are requested to submit a similar workplan to be completed within the period of 26 months. - Please refer to GCC 52.
22	Please define the Performance Guarantee test duration for each major system and the applicable penalties for failure to meet performance guarantees.	Necessary for evaluating contractual and financial risks. Understanding the penalties for performance shortfall impacts the design philosophy and selection of equipment with appropriate margins.	- No payment shall be made until the PG test is completed and it needs to be included in the bidder's workplan after signing of the contract.
23	Please provide a formal list of Scope Exclusions and specific Client Responsibilities, including: - Land acquisition and site handing over with clear title - Obtaining the Power Purchase Agreement (PPA) with BPC - Off-site infrastructure (road upgrades, transmission line extension beyond project boundary) - Customs duty exemptions (if any) - Environmental Impact Assessment approval	The document does not explicitly state what is NOT included in the Bidder's scope. Clear definition of responsibilities is essential for pricing, scheduling, and avoiding scope disputes during the project.	- Please refer to ERQ. These are all under the Bidder's scope and DoE will facilitate.
24	Please confirm the Incoterms applicable for this contract (e.g., DDP, CIF, FOB). Who is responsible for freight, insurance, and import duties? Who bears the risk of loss or damage during transportation?	The documents are ambiguous on this point. Clarifying Incoterms is standard commercial practice and is essential for accurate pricing and risk allocation. The requirement to transport equipment \"from anywhere to the site location\" suggests DDP (Delivered Duty Paid), but this is not explicitly stated.	- Addendum: Bidder is responsible for the (Carriage and Insurance Paid To) CIP Incoterm applicable for freight, insurance and import duties..

No.	Question	Reason	
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SECTION A: TECHNICAL CLARIFICATIONS			
25	GCC Clause 44 outlines a price adjustment mechanism for contracts over 12 months. Can you confirm that this provision applies? Please clarify the exact material indices to be used - is the Wholesale Price Index (all commodities) the only index, or are there specific material indices to be used (e.g., steel, aluminum, copper)?	The contract duration exceeds 12 months, and price adjustment can significantly impact the final contract value. Clarity on the mechanism and indices is required for accurate cost forecasting and risk assessment.	- The price adjustment is not applicable as per SCC.
26	Please provide the standard scope of work and terms for the Annual Maintenance Contract (AMC), including: - Expected response times for fault rectification - Plant availability targets during the AMC period - Liability for major component failures - Price escalation during the 5-year AMC period - Who is responsible for utilities (power, water) during the AMC period - Service Level Agreement (SLA) performance penalties (if any)	The document requires the Bidder to provide an AMC cost estimate but does not define the scope or terms. This makes it impossible to provide a firm and compliant AMC proposal, and the client's evaluation of the AMC cost will be subjective without defined terms.	- The AMC cost will not be considered for the evaluation of the bids as per the ERQ. AMC will be formalized on the availability of the funds after the completion of the project. - Bidders are suggested to provide a cost estimate based on the broad scope ERQ section 7.9.
27	Please provide the specific minimum coverage amounts and deductible amounts required for: - Contractors All-Risks Insurance - Transit Insurance - Third-Party Liability Insurance - Are there any specific insurer requirements (must be a Bhutanese insurance company)?	The minimum insurance amounts and deductibles are defined only by reference to the \"Insurance Policy of Bhutan,\" which is not specific enough for a firm quote. This information is needed for accurate insurance cost estimation.	- Consult Royal Insurance Corporation of Bhutan Ltd or Bhutan Insurance Ltd for the details.

28	The document states, \"The Procuring Agency shall pay the Contractor within twenty-five (25) days from the date of receipt of correct and verified bills.\" Does the standard 25-day payment term apply to the milestone-based payments outlined in the Contract Agreement? Can you clarify the expected timeline for the review and verification of \"correct and verified bills\" before the 25-day payment clock starts?	Understanding the full payment cycle (verification + payment) is essential for cash flow planning and financial modeling. Delays in verification can cause significant cash flow issues.	- Yes
29	Are there any customs duty exemptions available for renewable energy/green hydrogen projects in Bhutan? If so, please provide details and the process to claim such exemptions. What is the estimated timeline	The document states the Bidder is responsible for \"customs clearance (including reconciliation with authorities), custom duty charges, port clearance, port charges.\" Understanding duty exemptions and clearance	- Refer to Renewable Energy Tax Exemption Act of Bhutan, 2026.

No.	Question	Reason	
SECTION A: TECHNICAL CLARIFICATIONS			
	for customs clearance in Bhutan? Who is responsible for customs reconciliation?	Timelines are essential for accurate cost estimation and schedule planning.	
30	Please clarify whether the Fuel Cell Electric Buses (FCEBs) are included within the EPC scope or if they are a separate procurement. If included, are they required to be delivered and commissioned within the same 18-month design completion timeline?	Required to avoid scope ambiguity and incorrect pricing. The document mentions FCEBs in the ERQ but does not clearly state if they are part of the EPC scope or a separate package.	- Yes
31	The Defects Liability Period for the hydrogen plant is 2 years. For the FCEBs, it is also 2 years from final acceptance of each bus. Are	The document specifies \"Assured Annual Running\" of at least 74,460 km/year for the FCEBs. This performance requirement should be	- It will be based on the number of years.

	there any special considerations for the FCEB DLP regarding bus utilization (minimum annual kilometers)?	linked to the DLP to avoid disputes regarding warranty claims.	
32	The document states the Bidder shall provide one qualified O&M Plant expert for the entire Defect Liability Period at no additional cost. Does this expert need to be stationed at site full-time, or is a Is a periodic visit schedule acceptable? What are the expected qualifications and experience requirements?	This is a significant cost element that must be accurately estimated. The scope of the O&M expert's role (full-time vs. periodic) significantly impacts the cost.	- Addendum: O&M expert with Diploma and above (Related to Engineering Field) with minimum of 3 years of work experience in hydrogen operation and maintenance. - The O&M expert will need to be stationed two times in a year and as required by the Project Manager during.
33	The document requires \"a minimum of 2 weeks of hands-on training\" for operators and maintenance personnel. Please clarify: - Number of trainees to be trained - Level of training (basic operation, advanced troubleshooting, maintenance) - Whether training materials and manuals are to be provided - Whether training will be at the site or at a different location	The scope of training is a cost element and also a contractual obligation. Defining the training scope is essential for cost estimation and resource planning.	- 15 Officials to be trained. -Training Requirements 1. For Engineering design (Venue: DoE) 2. For Construction related (Venue: At Project Site) 3. Operational and Maintenance (Venue: At Project Site) Manuals will need to be provided.
SECTION C: DOCUMENT / ANNEXURE CLARIFICATIONS			
34	Can you provide a more detailed and itemized Bill of Quantities to be used for pricing? The current BOQ is a high-level summary listing only 5 parameters (Detailed Design, Civil Works, Supply and Installation of Equipment's, Safety Studies, Testing and Commissioning) and is not sufficient for a detailed cost breakdown.	Accurate pricing and client bid evaluation both require a detailed BOQ. Without this, the bidder cannot produce a comprehensive cost breakdown, and evaluation of bids will be inconsistent and arbitrary. This could lead to cost disputes after award.	- Please refer to all the activities in the EPC schedules and submit the BOQ accordingly.

No.	Question	Reason	
SECTION A: TECHNICAL CLARIFICATIONS			
35	The BDS and ERQ refer to several attachments: - \"KMZ file\" for site location - \"Annexure I\" for Water Quality Parameters - Drawings - \"Employer's Requirements Document\" for Specifications and Drawings Can you provide a complete list of all attachments and confirm if any are missing from the current package?	Several referenced documents are not clearly identifiable in the current document package. Missing design inputs prevent accurate proposal preparation and may indicate incomplete tender documentation.	- KMZ file attached- for the site location - Annex 1 in ERQ – Water quality parameters - Nothing is missing.
36	The document mentions that a KMZ file is attached, but it is not visible in the document package. Please provide the KMZ file and any site layout drawings showing land boundaries, contours, existing features, and proposed equipment locations.	Site layout and boundary information is essential for civil works, equipment placement, and overall plant layout design. The total land area is approximately 1 acre, and knowing the exact shape and dimensions is required for design.	- Please refer to the MoENR website, the site was attached with SBD and ERQ.
37	Are there any existing underground utilities (water lines, drainage, power cables, telecom cables) on or near the site? Please provide drawings showing their locations.	Existing underground utilities can impact civil works, excavation safety, and foundation design. Damaging underground utilities during construction could cause significant delays and liabilities. The site is adjacent to the river, and existing drainage patterns should also be understood.	- No
38	The document states \"all necessary meteorological data shall be collected from National Center for Hydrology and Meteorology, Bhutan for drainage and flood safety design.\" Has the DoE already	Meteorological data is essential for drainage design, flood protection wall design, HVAC system sizing, and overall civil design. The site elevation is	- Will be submitted after the award of contract during design phase.

	collected this data? If already collected, can you provide the data (rainfall intensity, temperature extremes, humidity, wind patterns, etc.) to expedite the design process?	approximately 2180-2182 meters above sea level, and local weather data is critical.	
39	The payment milestone includes 4% for \"Pre-commissioning safety audit.\" Please clarify: - The scope of this audit - The auditor's qualifications and accreditation requirements - Who will conduct it (third-party agency, DoE, or other) - The expected duration and deliverables	This is a payment milestone, and the scope must be clear to ensure compliance and avoid disputes regarding completion of the milestone. This also impacts the schedule and cost of safety compliance.	-Pre-Commissioning audit will be conducted by a third party agency nominated by the DoE; however, payments need to be made by the bidder. - Duration of 8 weeks. - The audit report shall verify and certify all the safety requirements indicated in ERQ clause 5.5. along with punch list, safety readiness certificate (category A issues: Must be fixed before start up to prevent explosion/fire hazards, category B: Minor issues that can be fixed after start up) and as required by the Project Manager.

No.	Question	Reason	
SECTION A: TECHNICAL CLARIFICATIONS			
40	The document states that \"all ownership and registration certificates for the installed systems and equipment shall be in the name of the DoE.\" Please confirm that the Bidder is only responsible for facilitating the transfer/registration (e.g., providing necessary documentation, attending meetings), not for the actual approval or legal processes which require DoE as the owner.	This is a legal and financial responsibility. The Bidder cannot legally own or register assets in a foreign country. This clause may create compliance issues and should be clarified to define the Bidder's role as a facilitator only.	- The ownership/registration will be in the name of the DoE and bidder shall facilitate the transfer/registration.

41	The document requires \"Display boards, billboards, LED/Neon signages.\" Please specify: - Number and size of display boards - Content requirements (project information, safety signage, directional signage) - Location of each sign - Whether LED/Neon signages are permanent or temporary	This is a cost element that must be accurately estimated. The scope and specifications of signages are not clearly defined.	- Project Information Board: One (1) permanent project information board at the main entrance of the plant, minimum size 2.4 m × 1.8 m. - Safety Signage Safety signages shall be installed throughout the facility in accordance with applicable international standards and good engineering practice. The quantity, size, and locations shall be determined by the Contractor based on the final plant layout and hazard assessment, subject to approval by the Project Manager. - Directional Signage: Directional and identification signages shall be provided at all major access roads, buildings, process units, emergency assembly points, exits, and other critical locations. The quantity and size shall be based on the approved detailed design. - LED/Neon Signage: The Contractor shall provide one (1) permanent LED illuminated project name sign at the main entrance of the facility.
42	All buildings shall be pre-fabricated (Pre-Fab) modular structures. Please provide more detailed specifications for: - Wall panel materials and thickness - Roofing materials and insulation - Flooring materials - Door and window specifications - Expected design life - Whether standard prefabricated modules are acceptable or custom design is required	This is a significant cost element. The current specification is high-level, and understanding the expected quality and materials is essential for accurate cost estimation.	
43	The document mentions existing infrastructure and road connectivity. Please provide details of the existing site infrastructure, including: - Access road conditions and weight-bearing capacity - Availability of temporary	Access to the site and availability of facilities will impact the construction methodology, logistics planning, and temporary facilities required. The site is approximately 27 km from	- The bridge capacity is 40 MT. - No temporary construction facilities present.

	construction facilities (laydown area, water, power) - Any existing buildings/structures on site - Contact person for site access and pre-bid inspections - Is there a security arrangement at the site?	Thimphu, and understanding access is critical.	
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No.	Question	Reason	
SECTION A: TECHNICAL CLARIFICATIONS			
44	Does the site require clearing of vegetation, trees, or existing structures? If so, is there any specific methodology or permits required for site clearing?	Site clearing is typically part of the civil works scope. Understanding the current site condition is essential for cost estimation and schedule planning.	Required Forestry Clearance has already been sought by the DoE; therefore, no major clearing of vegetation is required.
45	Considering the number of referenced documents that are not available in the current package (KMZ file, detailed site drawings, etc.), would the DoE consider extending the bid submission deadline to allow bidders adequate time to respond to clarifications and complete their proposals?	Several key documents are not available in the current package. This may be due to incomplete tender documentation. An extension would allow bidders to prepare more complete and competitive proposals. The pre-bid meeting is scheduled for July 17, 2026, and the bid closing date is August 10, 2026, leaving limited time for clarifications.	KMZ was shared and other site visits were to be carried out. Therefore, no extension is possible.
SECTION D: SAFETY / STUDIES CLARIFICATIONS			
46	The document requires several safety studies (HAZOP, SIL, HIRA, QRA, EMERA, DMP, HAC). Please clarify: - Are there any of these studies that have already been completed or partially completed by the DoE? - If completed, can you share the findings to avoid duplicate effort? - If not completed, is the	These studies are significant cost and schedule items. Understanding if any work has already been done can reduce duplication and save time. This also impacts the project schedule.	- The safety studies are to be conducted by the bidders and for timeline refer the EPC schedules in the ERQ.

	Bidder required to conduct all studies as part of the EPC scope? - What is the expected timeline for completing these studies?		
47	The document mentions PESO approval for equipment, storage, and hydrogen station layout. Please confirm the complete list of regulatory approvals required for a hydrogen station in Bhutan beyond those mentioned in the document.	The Bidder must ensure compliance with all applicable regulations. Missing a statutory approval could cause significant delays and cost overruns. This is a critical risk area.	- Bhutan does not have any regulatory approvals on the hydrogen.
48	Has the Environmental Impact Assessment (EIA) been completed for this project? If completed, please share the report. If not completed, is the Bidder responsible for conducting the EIA?	The EIA is a statutory requirement and can significantly impact the project schedule if not already completed. Clarifying responsibility and status is essential for schedule and cost planning.	- Bidders will need to conduct the ESIA, however the DoE will facilitate acquisition of those clearances.
49	The document requires hydrogen leak detectors at various locations. Please clarify: - The required number of detectors per area	This is a critical safety system, and the number and type of detectors significantly impact cost. Clarifying these requirements is essential for accurate cost estimation and design.	Shall comply with all the relevant international standards typically for a 1 MW HRS.

No.	Question	Reason	
SECTION A: TECHNICAL CLARIFICATIONS			
	- The type of detectors (catalytic, thermal conductivity, ultrasonic, etc.) - The response time requirements - Calibration and maintenance requirements - Whether the system should be integrated with the fire suppression system		

50	The document requires various fire suppression systems. Please clarify: - Whether the Bidder is required to provide a complete fire water distribution network and fire hydrant system - Source of fire water (municipal, river, storage tank) - Required fire water flow rate and pressure - Required fire water storage capacity (if any) - Whether the fire fighting system needs to be connected to local fire department infrastructure	This is a significant cost element. Understanding the full scope of the firefighting system is essential for accurate cost estimation.	All complete fire suppression systems must be installed by the bidders. The water source: River and no local fire fighting system infrastructure nearby.
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S.No	Discipline / Category	ERQ Reference	Query / Clarification Sought	PA's Response
A. Location, Site & Accessibility				
1	Location & Accessibility	Cl.1.2.1	Total plot is stated as ~1 acre (110–120 m x 30–32 m). Adding up the office-cum-switchgear building, electrolyser, compressor shed, storage cascade with statutory separation distances, dispenser canopy, WTP, ZLD/ETP, fire water tank, parking, 420 m of internal road (Cl.4.4.11) and the 20 m Wi-Fi/security envelope, the footprint appears to exceed 1 acre. Please confirm if any additional space (adjacent to current plot) is available for the proposed project.	Addendum- 420 meters internal road will not be required. There is no additional space for the proposed project.
2	Location & Accessibility	Cl.1.2	The nearby 33 kV line is ~500 m from site with no scope statement on who executes the line extension/augmentation. Please confirm: (a) whether Bhutan Power Corporation Ltd (BPCL) will extend the line up to the site boundary or if this is in Bidder's scope.	It is under Bidder's scope
3	Location & Accessibility	Cl.1.2.1	Site elevation is 2,180–2,182 m with ~2 m grade variation. Please share the topographical survey/contour drawing and geotechnical (soil bearing capacity) report.	It is under Bidder's scope

4	Location & Accessibility	Cl. 1.3.1	The water source is the Wangchhu river. Please clarify who is responsible for obtaining water abstraction rights/permits, and whether the intake structure, pump house, and raw-water conveyance pipeline from the river to the site are included in the Bidder's scope of works.	It is under Bidder's scope
5	Location & Accessibility	Cl. 4.4.19	The Bidder is responsible for all license fees, technology fees, customs duty, and port charges. Please confirm whether any customs/duty exemption applies to green-hydrogen/renewable-energy equipment imported into Bhutan, and whether DoE will assist in securing such exemption certificates.	It is under Bidder's scope and DoE will facilitate.
6	Location & Accessibility	General	Please confirm road/bridge weight and width restrictions on the entire transport route from the nearest port/border crossing (Phuentsholing/Jaigaon) to Jamji, including the bridge capacity referenced in the footnote to Cl.C.1 (electrolyzer module sizing). Please share any known load-restriction information.	Minimum Bridge Capacity is 40 MT
7	Location & Accessibility	General	Please confirm the nearest point of entry into Bhutan for ODC (over-dimensional cargo) and whether the Bidder needs to arrange a customs-bonded corridor through India, or if DoE/RGoB will facilitate transit permissions.	It is under Bidder's scope and DoE will facilitate.
8	Location & Accessibility	Cl.4.4.11 / 5.6.1.11	Cl.4.4.11 specifies ~420 m of road black-topping while Cl.5.6.1.11 (Civil section) separately specifies ~10 m of road works. Please clarify whether these are two different stretches (approach road vs. internal road) or a drafting inconsistency, and confirm the exact total road scope.	Addendum- 420 meters internal road will not be required.
9	Location & Accessibility	Annexure I	The water-quality parameter table (Annexure I) is blank. Please confirm if DoE/NCHM has any existing water-quality data for the Wangchhu river at the offtake point.	Not available

B. Project, Bidding Process & Commercial

10	Commercial	GCC 44 / SCC	GCC Clause 44 describes a price-adjustment formula, but the SCC entry against GCC 44 states "Price adjustment: None." Please confirm unambiguously whether price adjustment applies to this 24-month contract, since GCC 44.2 would normally trigger adjustment for contracts exceeding 12 months.	GCC 44 not applicable for this contract
11	Commercial	GCC 46.1	Liquidated Damages are 0.05%/day of contract price, Bidder requests to consider total LD capping to 5% due to remote location. Please confirm whether LD is assessed on the whole contract price or only the value of the delayed milestone/section, and whether partial	Total Contract Price

			completion (e.g., civil complete, hydrogen systems delayed) attracts pro-rata relief.	
12	Commercial	Cl.4.4.20	DoE will provide "necessary facilitation and coordination support" for clearances (power, environmental, water, land) but the Bidder is responsible for obtaining them. Bidder requests client to consider all statutory approvals specific to Bhutan under their scope. Bidder will provide necessary documentation support.	Bidders responsibility and DoE will facilitate.
13	Commercial	GCC 58	Disputes are referred to the Bhutan Alternative Dispute Resolution Centre (BADRC). Bidder requests to consider neutral arbitration center.(e.g Singapore)	Not Applicable
14	Commercial	Cl.3.5 / 4.4.25 / 4.4.30	Multiple clauses state that omissions from the ERQ do not relieve the Bidder of responsibility to deliver a "fully functional and compliant facility." Please confirm the process and criteria DoE will use to determine whether an item claimed as a Variation (Cl.37, chargeable) is instead deemed an "implied/incidental" scope item (non-chargeable) under these clauses.	It is Chargeable and will be as per GCC 37 and GCC 38.
15	Commercial	Evaluation Criteria – Turnover	Minimum average annual turnover for full points is Nu. 900 million (~USD 10 million equivalent) – please confirm the applicable USD/BTN or USD/INR exchange rate and reference date to be used for equivalence and whether consolidated (parent company/group) turnover of a JV lead member is acceptable.	Please refer to ITB 13 for exchange rate and reference date. Addendum- Average Annual Turnover will also be assessed as per ITB 28.
C. Process & Electrolyser System				
16	Process/Electrolyzer	Cl.C.1, Item 2	Rated electrical input is specified as 1,000 kW OR 4 x 250 kW modules, subject to bridge capacity for transport. Please confirm if DoE has a preference/mandate on modular configuration, or if the Bidder has full discretion to select stack configuration based on its own OEM's proven package sizes.	No preference but it needs to be modular and as per the bridge capacity of 40 MT.
17	Process/Electrolyzer	Cl.3.6	A feasibility study for ammonia production/derivatives from excess hydrogen, and industrial/medical use of by-product oxygen, is required. Please confirm if this is a paid deliverable within the EPC scope or a separate, compensable study, and define its expected depth (concept-level vs. bankable feasibility).	Bankable and paid deliverable under the EPC scope and to be completed during the engineering design phase.
18	Process/Electrolyzer	Cl.C.1, Item 6/7	Stack energy consumption ≤55 kWh/kg (AC) and stack degradation 0.5–1%/year are specified as fixed ranges rather than Bidder-guaranteed values. Please confirm if	These are the Minimum acceptable thresholds for technical evaluation, however bidder-guaranteed values are

			these are minimum acceptance thresholds for technical qualification, or contractual Performance Guarantee parameters subject to LD/penalty at the PG test.	contractual performance Guarantee parameters subject to LD/Penalty at the PG test.
19	Process	Cl. C.4, Sl. 4	The dispenser requires 'double nozzle (simultaneous fueling into two vehicles)' at a minimum flow of 3 kg/min. Please confirm whether this 3 kg/min is per nozzle or the combined/total flow rate, noting only two FCEBs are being procured under Part B.	For each nozzle, given the future expansion in FCEV fleets.
20	Process	Cl. 7.2	Bidder requests the client to consider the plant to be designed for minimum plant availability of 90% in place of 95% considering at least 30 days annual downtime.	95% was taken into consideration without pre-planned maintenance, however it must fulfill the min. operating hours.
D. Electrical				
21	Electrical	Cl.5.1.1	Power is drawn from Bhutan Power Corporation Ltd (BPCL) at HT level down to plant switchgear. Please confirm the point of supply/point of common coupling, available fault level, and whether a dedicated feeder/bay at the BPCL substation is already available or needs to be newly created (and by whom).	The point of supply is within 500 meters and it needs to be LILO. The works fall under the Bidder's scope.
E. Instrumentation, Control & Cybersecurity (ICS/SCADA)				
23	Instrumentation /ICS	Cl.5.4.1.8 / Annexure II-ICS	Cybersecurity compliance with IEC 62443 is required, along with a reference to "National Cybersecurity Strategy, GovTech 2025" (Cl.5.4.3.4) of Bhutan. Please share this national cybersecurity strategy document/standard (or the relevant excerpts) as it is not a globally standard reference the Bidder can source independently.	https://btcirt.bt/wp-content/uploads/2025/03/National-Cybersecurity-Strategy_Published.pdf
24	Instrumentation /ICS	Cl.5.4.2.6	SCADA historians must store a minimum of 1 year of data. Please confirm the required data resolution/tag count and whether this historian must also interface with any DoE central monitoring system beyond the web-client access described in Cl.5.4.2.10.	It should be available at project SCADA system only. The historian shall be capable of recording all process, electrical, alarm, and event data at configurable logging intervals, with a minimum online storage capacity of one (1) year. The Contractor shall size the historian storage and SCADA tag database based on the final detailed engineering design, including a minimum of 20% spare capacity for future expansion.

25	Instrumentation /ICS	Cl.5.3.1.8	Performance Track Record (PTR) of minimum 4,000 hours is required for field instruments and system/subsystems including PLC/SCADA. Please confirm whether this PTR must be demonstrated specifically in a hydrogen/high-pressure gas application, or whether general industrial PTR (any application) is acceptable.	PTR in hydrogen/high pressure gas application is desired but general industrial PTR is also acceptable.
F. Civil & Architectural				
26	Civil	Cl.5.6.1.7 / IS 1893-1	Please confirm the applicable seismic zone (as IS 1893-1 doesn't contain information on Bhutan's seismic zone), along with zone factor(Z).	Bhutan currently is preparing information on seismic zones however the Bidder can refer IS 1893, 2025
27	Civil	Cl.5.6.1.8 / IS 875-3	Please confirm the site-specific basic wind speed to be adopted (IS 875-3 is an Indian code; Bhutan-specific wind data, if available from NCHM, should be referenced) given the site's hill/valley terrain, which can produce different wind loading than plains assumptions.	No specific wind data is available.
G. Safety Studies, HSE & Statutory Approvals				
28	HSE/Safety	Cl.5.5.1.8 / 5.5.1.20	The ERQ requires PESO approval of equipment, storage, and layout multiple times, but PESO (Petroleum & Explosives Safety Organisation) is an Indian regulatory authority with no jurisdiction in Bhutan. Please confirm the actual competent authority in Bhutan for approving hazardous-area hydrogen installations, or if PESO approval via an Indian counterpart will suffice project requirement.	Bhutan does not have competent authority in regarding hydrogen and PESO approval will work.
29	HSE/Safety	Cl.4.4.20	Bidder requests client to consider Consent to Establish (CTE), Consent to operate (CTO) & environmental clearance for the proposed project under client scope. Bidder will provide necessary documentation support for getting approvals.	It is Bidders responsibility and DoE will facilitate.
H. Testing, Commissioning & Performance Guarantee				
30	Testing/Commissioning	Cl.6.3.3(b)	Trial operation requires each equipment to run continuously for a minimum of 8 hours without tripping, over 2 consecutive days, while the PG test (Cl.6.3.4) for the compressor separately requires continuous operation at minimum 50% load for 100 hours. Please clarify.	The bidders have to complete both the tests.
31	Testing/Commissioning	Cl.6.3.4, Item 4	PG test for the dispensing system requires "continuous dispensing capacity of 100 kg hydrogen" during PG, while the plant's total usable storage is only 50 kg (Cl.C.3, Item 2). Please clarify how a 100 kg continuous-dispensing PG criterion is to be demonstrated against a 50 kg usable storage	Addendum- 50 kg continuous dispensing capacity.

			capacity – whether this implies concurrent electrolyser production feeding the test, or if this is a drafting error.	
I. Operation, Maintenance, Warranty & AMC				
32	O&M/Warranty	Cl.32 / GCC 32.1	Extended DLP is specified per-equipment: Electrolyser – 60,000 operating hours (~7–8 years at 8,000 hrs/yr), Switchgear/Transformer – 730 days (2 years), Rectifier – 1,825 days (5 years). Please confirm whether the extended-DLP bank guarantee (10% of contract value, Cl.32.1) must be kept valid for the longest of these periods (i.e., ~7–8 years for the electrolyser) or a separate, equipment-specific guarantee schedule is acceptable.	Equipment-specific schedule is acceptable.
33	O&M/Warranty	Cl.7.9	AMC cost estimate is required for 5 years and "extendable if required," but Section D (BOQ) states AMC cost "will not be considered for evaluation." Please confirm if AMC pricing is nonetheless contractually binding once submitted (i.e., DoE can hold the Bidder to the quoted AMC rates in years 3–5 after DLP), or purely indicative.	Cost for AMC will not be considered for evaluation, however AMC will be subjected to fund availability after the project execution.
34	O&M/Warranty	Cl.7.7	One qualified O&M Plant expert must be deployed "at no additional cost" for the entire DLP (2 years, or longer for extended-DLP equipment). Please confirm if this is a single, permanently resident expert for the full 2 years, or an as-needed/periodic deployment.	Already answered
35	O&M/Warranty	Cl.7.3	Consumables must be supplied free during the 2-year DLP; the Bidder must specify consumption rate, replacement frequency, and estimated annual cost. Please confirm whether this consumable estimate is used only for informational/BOQ purposes or forms part of the binding AMC commitment referenced in Cl.7.9.	Consumables must be supplied free during the 2-year DLP; however, specified consumption rate, replacement frequency, and estimated annual cost forms part of the binding AMC which is subject to funding.
J. Fuel Cell Electric Buses (FCEB) Supply				
36	FCEB (Buses)	Part B, Sec. 2, Item 2 vs Appendix 1 BOQ	The FCEB technical specification lists bus length as '7–9 m', while Appendix 1 (Bill of Quantities) specifies 'Supply of 12 m Fuel Cell Electric Bus'. Please clarify the correct required bus length, as this significantly affects seating capacity, GVW, and hydrogen consumption assumptions.	Bus requirement -: 7-9 meters.
K. General				

37	General	Cl. 4.1 / 4.3 vs EPC Schedule	Clause 4.3 implies overall completion (design – 6 months, plus completion of all facilities – 18 months) of ~24 months from contract signing, whereas the attached EPC schedule (Gantt) shows PG Test completion considerably later than this window. Please reconcile the contractual completion period in the text with the detailed schedule provided and confirm the binding completion date/duration.	Addendum- 26 Months after signing of contract.
38	General	Cl. 4.4.5 vs Cl. 5.6.2	Clause 4.4.5 mandates that all buildings be Pre-Fab modular structures, while Clause 5.6.2 references features (false flooring, RCC-type detailing) typically associated with conventional construction. Please confirm whether any building/structure (e.g., flood wall, boundary wall, foundations) is excluded from the Pre-Fab requirement.	Boundary walls and any protection and safety walls are excluded from the Pre-Fab requirement.
39	General	Cl. C.1, Sl. 12	‘Technology Maturity: Minimum 5 years with completion certificates, client references, and proven installations’ is required. Please specify the minimum number and capacity of reference installations required for the Bidder/OEM to meet this technical eligibility criterion.	Technology manufacturers should demonstrate that their technology maturity is at least 5 years.
40	General	General	Please confirm whether a pre-bid site visit will be organized/facilitated by DoE (referenced in the Annexure I note on water-quality testing during the site visit), and share proposed date(s), given bidders will need to plan travel to Bhutan.	Bidders should plan travel to Bhutan but DoE will facilitate the visa/permits for entry to Bhutan.
40	General	General	Tender specifies that architecture design should reflect the culture of Bhutan. Kindly provide relevant details for the same.	Paintings and design shall follow Traditional Architecture Guidelines. https://admin.theiguides.org/Media/Documents/TRADITIONAL-ARCHITECTURE1.pdf

S. No	Discipline / Category	ERQ Reference	Query / Clarification Sought	Client Reply
K. General				
1	General	Cl. 19 Section D. Sl.1	Clause 19.1 says "Bidder may always submit their bids by hand", kindly confirm if the bid can be submitted online (or) through speed post to the BDS mentioned address	Speed post to the mentioned address is acceptable, however Bidders needs to ensure that it reaches before the bid submission deadline.

2	General	Section E Cl. 22 / Cl. 24/ Cl.28	Clause 22 implies The Procuring Agency shall open the Bids on the same day of bid submission deadline including The Bidders’ names, the Bid prices, the total amount of each Bid. Kindly request to have the bid opening and evaluation online as well, also kindly let us know the timeline for financial evaluation result as well.	Addendum- Once a Technical Bid is evaluated, only the technically qualified bid will be invited for financial opening, which will include The Bidder's name, the Bid prices and the total amount of each bid.
3	General	Section E Cl. 28	Clause 28, S.No 4 says "The determination shall not take into consideration the qualifications of other firms such as the Bidder’s subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors), or any other firm(s) different from the Bidder", kindly request to reconsider for considering the qualification of bidders where parent, affiliate company has majority shareholding in the bidder company - This allows a wide participation of bidder across.	Not Applicable.
4	General	SECTION III. EVALUATION AND QUALIFICATION CRITERIA CL. 2.1	The total marks indicated for “Technical Approach and Compliance with Employer’s Requirements” are 15, whereas the marks allocated across its sub-criteria total 25. Kindly clarify and provide the corrected marks distribution.	Addendum- “Technical Approach and Compliance with Employer’s Requirements” is 25 points, however the “Contract of Similar Size and Nature” will be assessed out of 20 points.
5	General	SECTION III. EVALUATION AND QUALIFICATION CRITERIA CL. 2.2	Experience in successfully executing EPC projects comparable in scale, complexity and technology, including Green Hydrogen generation plants, hydrogen refueling stations, and integrated Green Hydrogen generation-cum-refueling facilities, shall be considered as relevant experience for evaluation and scoring.	Request not Applicable.

6	General	SCC GCC 1(16), 1(25) and 20.1	GCC 1(16): “The Intended Completion Date for the whole of the EPC shall be: 26 months after signing of the contract.”GCC 1(25): “The Start Date shall be signing of the contract.”GCC 20.1: “The Site Possession Date(s) shall be: after obtaining the required clearances.” We Request to Please specify the clearances required before site possession, the party responsible for obtaining each clearance and the firm site-possession date. We request that the completion period commence from complete and obstruction-free handover of the Site. Any delay in site possession or Employer-responsible clearances should entitle the Contractor to an appropriate extension of time and demonstrable additional cost.	Request not applicable. The Forestry Clearance has already been sought, while ESIA is required for Land Clearance and Land Ownership certificate, which the Department will facilitate right after ESIA is completed.
7	General	GCC 10.1	“The Contractor shall cooperate and share the Site with other contractors, sub-contractors, public authorities, utilities and the Procuring Agency between the dates given in the Schedule of Other Contractors, as referred to in the SCC. The Procuring Agency may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.” We Request to Please provide the Schedule of Other Contractors and a detailed interface and responsibility matrix, including shared facilities and utilities. Any subsequent modification affecting the Contractor’s work should be treated as a Variation or Compensation Event.	Request not applicable
8	General	GCC 8.1 and 8.2	GCC 8.1: “The Procuring Agency shall define the mechanism for sub-contracting parts of EPC to sub-contractors.”GCC 8.2: “The principal contractor shall commit the Subcontractor with their names during the Bidding and deploy the same once selected as winning Bidder.” We request to Please confirm that only major or critical subcontractors are required to be identified at the bidding stage. OEMs, vendors and other specialist subcontractors may be finalized after award, subject to the Procuring Agency’s approval, and may be replaced with equivalent or better-qualified entities.	Subcontracting is allowed only for Civil and Electrical Works as per ITB 31.1 and BDS and subcontractors must be determined during the bidding stage.

9	General	GCC 11.1 and SCC 11.4	GCC 11.1: "Failure to deploy the specified personnel or equipment may result in deductions at the rates stipulated in the SCC." SCC 11.4: "The amount to be deducted for the key personnel not employed by the contractor for each personnel will be determined based on their monthly remuneration. The amount to be deducted for the equipment not available at site will be determined based on the equipment charges." We Request to Please specify the required deployment periods for key personnel and equipment, together with the applicable deduction rates and maximum cap. Kindly confirm that deductions will apply only after written notice and a reasonable opportunity to rectify the deficiency.	After signing of contract, the bidder must submit a final workplan indicating deployment of key personnels and equipment to achieve the agreed milestone. Failure to deploy will result in GCC 11.4.
10	General	GCC 12–14 and SCC 14.1	GCC 14.1: "The Contractor shall provide, in the joint names of the Procuring Agency and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the SCC." SCC 14.1: "The minimum insurance amounts and deductibles shall be All-Risks and transit insurance of the EPC Equipment, Plants, and unfixed Materials as per Insurance Policy of Bhutan." We Request to Please provide the complete insurance schedule, including CAR/EAR, transit, third-party liability, workers' compensation, professional liability and FCEB insurance, along with the applicable coverage limits and deductibles. Please also confirm that care and operational risk will transfer to the Procuring Agency upon Taking Over, with the Contractor thereafter remaining responsible only for defect and warranty obligations.	All insurance schedules must be as per the Royal Insurance Corporation of Bhutan Ltd or Bhutan Insurance Ltd. Care and operational risk to the Procuring Agency will be governed by GCC 12.1 "Procuring Agency Risks"
11	General	GCC 17.5 and 21.2	GCC 17.5: "All Drawings prepared by the Contractor for the execution of the temporary or permanent EPC are subject to prior approval by the Project Manager before use." GCC 21.2: "The Project Manager shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that he does not require to do so." We request to Please specify the review and approval timelines for drawings, documents, inspections and tests. Kindly confirm that delays beyond the stipulated review period will entitle the Contractor to an appropriate extension of	2-4 Weeks

			time and applicable cost consequences.	
12	General	GCC 39–40 and Contract Agreement Clause 5	GCC 39.1: “The Contractor shall submit to the Project Manager monthly Certificates statements of the value of the EPC executed.”GCC 39.2: “The value of EPC executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.”Contract Agreement Clause 5: “The terms of payment will be upon completion of each milestone.”“Supply and Installation of Equipment and FCEBs – 50%.” We request to GCC 39 provides for monthly payment based on measured work, whereas the Contract Agreement provides milestone-based payments. Please clarify the governing payment mechanism and provide a detailed breakup permitting progressive payments within each milestone. In particular, kindly provide separate payment stages for equipment manufacture/supply, delivery at Site, installation and commissioning instead of combining supply and installation under one 50% milestone.	Addendum- The payment will be milestone based. Within the supply and installation (50%), 20% for supply and delivery at site with original invoice, dispatch clearance from the purchaser and materials acceptance certificate, FAT, warranty certificates and others. 30% after installation.
13	General	GCC 24, 26 and 41	“The following shall be Compensation Events allowing for time extension.”The listed events include delayed site access, delay in drawings or instructions, delay ordered by the Project Manager, interference by other contractors and instructions for unforeseen conditions. We request to Please confirm that Employer-caused delays, delayed access, delayed approvals, changes in scope, interference by other contractors and other Compensation Events will entitle the Contractor to both an extension of time and reimbursement of demonstrable additional cost. Force Majeure events may be limited to an appropriate extension of time unless otherwise agreed.	Yes, we confirm that.

14	General	GCC 31–32 and SCC 32.1	GCC 32.1: “The Bidder shall provide an extended Defects Liability Period for the relevant equipment of the plant, specified in the SCC and shall furnish additional security, in the form of a Bank Guarantee, equivalent to the 10% of the contract amount and valid for the duration of such extension.”GCC 32.2: “The extended Defects Liability Period shall be in accordance with the equipment guarantee/warranty provided by the respective manufacturers.”SCC 32.1: “Electrolyzer for at least 60,000 operational hours; Switchgear, transformer should be 730 days; Rectifier for at least 1825 days; Compressor, storage tank, dispenser and Fuel Cell Electric Buses.” We request to Kindly re-consider the DLP period for all the equipment. Bidder suggests the following language - "The manufacturers guarantee for trouble-free working of the plant/equipment/subsystem for one year from the date of acceptance shall be furnished" Bidder requests to elaborate the operating conditions of the plant under which the guarantees can be provided as specified.	We cannot change the GCC 32.1 and SCC 32.1.
15	General	GCC 42–44, SCC 44 and SCC 35.4	GCC 44.2: “The price adjustments shall be mandatorily applicable for contract duration of more than twelve (12) months.”SCC 44: “Price adjustment: None.”GCC 42.1: “The prices Bid by the contractor shall include all duties, taxes and levies that may be levied... as of the date twenty-one (21) days prior to the closing date for submission of Bids.”SCC 35.4: “The currency of payment shall be made in Ngultrum (Nu.) or Rupees (Rs.).” We request to GCC 44 states that price adjustment is mandatory for contracts exceeding 12 months, while SCC 44 states “Price adjustment: None,” although the contract duration is 26 months. Kindly reconcile these provisions and allow price adjustment in accordance with GCC 44. Please also clarify the treatment of changes in taxes, duties or applicable law after the bid base date, the permitted payment currency and the applicable exchange-rate date and mechanism.	GCC 44.2 is irrelevant for this project,

16	General	GCC 55.6	“If the project has been completed then deposit in an RGR account, otherwise 20% should be allowed to be used for the project, if the project is still in complete.” We request to The meaning and contractual applicability of the “RGR account” and the referenced 20% amount are unclear. Kindly provide a detailed clarification of this provision or delete it if it is not applicable to the present EPC Contract.	The GCC 55.6 is applicable for this project.
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S. No.	Evaluation pointers	Reasoning	PA's Response
1	ITB 28.4: The determination of the qualification of bidder shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 16. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors), or any other firm(s) different from the Bidder.	The qualification and experience of the Parent Company be considered for bidder qualification, provided that the Parent Company holds at least 40% shareholding in the Bidder and exercises management and technical control over the Bidder. In such cases, the Parent Company's technical capability, financial strength, and relevant project experience directly support the Bidder's ability to successfully execute the contract.	The clause mentioned in ITB 28.4 couldn't be amended. This will arise in the conflict of interest as well as not having the required technology and personnel and equipment during the actual project implementation.
2	ITB 17.1: As indicated in the BDS, domestic contractors may receive a margin of preference in Bid evaluation, for which this clause shall apply and the procedure used to apply the margin of preference shall be as stipulated in the BDS. Not applicable.	A Margin of Preference for Domestic Bidders be made applicable under this tender. The scope of work involves significant local works like civil and electrical, making the participation of domestic companies essential for successful project execution. Providing a Margin of Preference would encourage meaningful collaboration between international technology providers and local companies, thereby promoting technology transfer, development of local capabilities, and long-term service support, while aligning with the objective of increasing domestic participation in infrastructure projects.	The Margin of Preference will not be applicable due to the complexity of the project. For the margin of preference to be eligible, In accordance with ITB 17, it needs to be registered in Bhutan and major ownership needs to be Bhutanese nationals. However the provision for civil and electrical works can be taken as subcontract as ITB 31.1

3	ITB 17.3: Joint Ventures, Consortia and Associations of domestic firms may be eligible for the margin of preference provided that: (a) the individual partners satisfy the criteria of eligibility specified above in (a) and (b); (b) the JV/C/A is registered in Bhutan; (c) the JV/C/A satisfies any other criteria specified for the purpose of domestic preference eligibility, as specified in the BDS.	Please clarify if all the individual partners (the foreign entities of the JV) have to fulfil the criteria mentioned in 17.3.a. Please also confirm if the qualification criteria (technical & commercial) of all the JV partners will be combined & considered as that of the JV	Since no Margin of Preference is applicable, the clause 17.3.a is irrelevant. However, for the qualification criteria, the consideration JV will be considered as per the ITB 11 and ITB 28.6.
4	ITB 15.1 In lieu of a Bid Security, the Procuring Agency may instruct bidders to sign a Bid Securing Declaration in the form provided in the bidding documents 9 accepting that they will be required to pay bid security amount specified in the BDS within five (5) days, if: (a) Bidder withdraw or modify their Bids during the period of validity; (b) Bidder fails to accept the arithmetical corrections of its bid price; or (c) Bidder is awarded the contract and they fail to sign the contract, or to submit a performance security before the deadline defined in the bidding document.	Please clarify if any EMD has to be made with the bid security declaration. In case yes, please indicate the details of the EMD submission.	Please submit a bid securing declaration form only. EMD is not required to be submitted. However, bidder will need to pay Nu.5,000,000 as bid security amount specified in the BDS if; a), b), c)
5	GCC 36.2: The Procuring Agency shall make Mobilization advance payment of Ten percent (10%) to the Contractor against provision by the Contractor of an Unconditional Bank Guarantee in the form and by a bank acceptable to the Procuring Agency in amounts and currencies equal to the Advance Payment. The Guarantee shall remain effective until the Advance Payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor.	Please mention the financial institutions acceptable to the procuring agency.	All the national financial institutions under the Royal Monetary Authority, Bhutan.
6	Bid evaluation	In case of minor/major deviation of Bids from the procuring agencies specs, how can they be submitted? How will deviations be evaluated during the bidding process? Is there any mechanism to evaluate the deviations?	Any deviations from the technical specs will be rejected.

7	C. Minimum technical specs: 1. Electrolyser technology: PEM/Alkaline	PEM is the better technology for a HRS. Around the world most of the refueling stations are set using PEM technology. This is due to the fact that PEM has lower footprint, high response to dynamic operation, higher pressures suitable for compression, etc	Both technologies will be accepted.
8	C. Minimum technical specs: 2. Rated electrical input	Please specify what is meant by rated electrical input. If this is the minimum stack size. It is better to have a single module of 1 MW rather than 4 modules of 250 kW, because in such a case, there will be multiple hydrogen piping, oxygen piping coming out of the Electrolyser, which makes the process design complicated, controlling of hydrogen parameters difficult as well as operation & maintenance complex.	The capacity required is 1 MW but the configuration of the electrolyzer will be dependent on the weight of the system. The bridge capacity is 40 MT.
9	C. Minimum technical specs: 5. Plant availability: ≥ 95	Based on our experience, the system requires at least 30 days of downtime for maintenance and to ensure longevity of the equipment. This would relate to the plant availability being 90%, instead of 95%, which is more than adequate for proper O&M	The plant availability has been assumed without any pre-planned maintenance. However, we request the operating hours to be at least 8000 hours/annum at full load.
10	C. Minimum technical specs: 9. outlet pressure: minimum 25 bar	The outlet pressure should be minimum 35 bar from the electrolyser so as to decrease the cost of compression, as well as the no of stages required to compress the hydrogen upto 500bar.	It is the minimum criteria and will be in the acceptable range.
11	6.3.1 Factory Acceptance Test (FAT) a) FAT shall be carried out for the complete hydrogen generation and fuelling system prior to dispatch from the manufacturer's works. b) FAT shall be conducted in accordance with applicable international standards, codes, and guidelines including ISO, IEC, ASME, NFPA, CGA, and applicable national regulations. c) FAT shall include inspection, functional testing, safety verification, and integrated system testing. d) Performance testing shall include continuous operation for 24 to 48 hours. e) System-wise FAT requirements shall	The FAT of complete HRS will not be possible at the factory as many of the items are bought-out and complete integrated FAT is not possible. However individual items FAT will be carried out as per the standard norm. The complete HRS test will be carried out at site and can be part of SAT. Please confirm if the same is accepted.	Not for the whole system but for the associated components (e.g compressors integrated with electrolyzer and compressor with storage)

	include but not limited to:		
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S. No	Clause	Tender Points	Tech comments dt: 16-07-2026	Procuring agency response
1	ITB 28.4	The determination of the qualification of bidder shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 16. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors), or any other firm(s) different from the Bidder.	We request the Employer to permit consideration of the technical and project experience of the Bidder's parent company, provided that the parent company holds a majority shareholding in the bidding entity. In emerging and specialized technology sectors such as Green Hydrogen, it is common industry practice for OEMs to participate in tenders by leveraging the technical and project experience of their parent entities. Restricting qualification solely to the bidding entity may unnecessarily limit participation by technically qualified bidders without providing any additional assurance regarding successful project execution. We therefore request that the Employer allow the credentials of the parent company to be considered for qualification, subject to documentary evidence of majority shareholding and submission of appropriate supporting documents, such as shareholding records, Board resolutions, or other legally valid documents demonstrating the parent company's commitment to support the execution of the project.	ITB 28.4 is valid for this contract.

2	ITB 28.6	In the case of Joint Venture, Consortium & Association (JV/C/A), the individual credentials of the JV/C/A partners need to be averaged using their stake for the purpose of evaluation under the parameters of similar work experience, performance score from previous work, bid capacity and credit line available. For the parameters of equipment and manpower, there sources or information committed/provided by the JV/C/A as a single entity will be considered for award of points.	We request that the requirement for weighted averaging of JV partner credentials for similar work experience, performance score, bid capacity and credit line be reconsidered. In specialized technology projects such as PEM/Alkaline electrolyser systems, the technical capability and project execution experience of the technology partner cannot be proportionately reduced based on its equity participation in the Joint Venture. The technical expertise, engineering know-how, commissioning capability and operational experience contributed by the technology partner remain available to the project irrespective of its percentage stake in the JV. Averaging the credentials based on equity participation may inadvertently disadvantage technically qualified Joint Ventures and discourage collaborations between experienced international technology providers and domestic EPC companies, thereby reducing competition.	Request not acceptable
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3	EQC 2.2.1	Contracts of Similar Size and Nature Over Last 10 Years	The scoring guidelines state that the experience evaluation will be carried out on a pro-rata basis. We request clarification on the methodology for pro-rata evaluation in the following scenario: If a bidder submits one completed project of similar nature, but with a capacity significantly larger than the capacity envisaged under this tender, how will the score be evaluated? For example, if the tender is for a 60 kg/day Green Hydrogen Refuelling Station and the bidder submits experience of one completed 1,000 kg/day or larger Green Hydrogen Refuelling Station, will the bidder receive: Points corresponding only to one completed project, or Pro-rata points considering the higher project capacity? We request the Employer to clarify the methodology and formula for pro-rata evaluation in such cases to ensure uniform interpretation by all bidders.	Scoring Formula $\text{Weighted Projects} = \sum (\text{Number of Projects} \times \text{Relevance Factor})$ $\text{Score} = \left(\frac{\text{Weighted Projects}}{3} \right) \times \text{Maximum Marks}$ Maximum score = 15 points (or the maximum marks allocated to the criterion). Example 1 • 2 fully similar projects = $2 \times 1.0 = 2.0$ • 1 partially similar project = $1 \times 0.5 = 0.5$ Weighted Projects = 2.5 $\text{Score} = \frac{2.5}{3} \times 15 = 12.5$ Example 2 • 1 fully similar project = 1.0 • 2 partially similar projects = $2 \times 0.5 = 1.0$ Weighted Projects = 2.0 $\text{Score} = \frac{2.0}{3} \times 15 = 10$ The Points will correspond to only one project.
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4	GCC 36.2	The Procuring Agency shall make Mobilization advance payment of Ten percent (10%) to the Contractor against provision by the Contractor of an Unconditional Bank Guarantee in the form and by a bank acceptable to the Procuring Agency in amounts and currencies equal to the Advance Payment. The Guarantee shall remain effective until the Advance Payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor.	While a 10% mobilization advance is available against a Bank Guarantee, substantial expenditure is incurred during the engineering phase, including detailed design, statutory approvals, vendor engineering, procurement planning, and advance payments to OEMs and long-lead equipment suppliers. These costs arise well before the commencement of major equipment installation. We therefore request a modest redistribution of milestone payments by increasing the payments linked to engineering and reducing the final commissioning milestone, without altering the overall financial commitment of the Employer.	Request not acceptable.
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5	GCC 46.1	The liquidated damages for the whole of the EPC are 0.05% per day and the total amount must not exceed ten percent of the contract price.	We request the Employer to revise the maximum cap on Liquidated Damages from 10% to 5% of the Initial Contract Price. A cap of 5% is consistent with industry practice for EPC projects and provides a reasonable balance between safeguarding the Employer's interests and maintaining a fair allocation of contractual risk. Furthermore, It also accounts for project delays arising from factors beyond the Contractor's control, such as site readiness, statutory approvals, and utility interfaces.	This is the standard and we cannot change.
6	ERQ testing commissioning and Acceptance test 6.3.1	FAT shall be carried out for the complete hydrogen generation and fuelling system prior to dispatch from the manufacturer's works. b) FAT shall be conducted in accordance with applicable international standards, codes, and guidelines including ISO, IEC, ASME, NFPA, CGA, and applicable national regulations. c) FAT shall include inspection, functional testing, safety verification, and integrated system testing. d) Performance	The FAT of the complete Hydrogen Refuelling Station (HRS) can only be conducted at the project site, as system integration is carried out only after installation and several equipment packages are procured as bought-out items from different manufacturers. Therefore, individual FATs should be conducted at the respective manufacturers' works, while complete system integration and performance testing should form part of the Site Acceptance Test (SAT).	The question is already answered.