TERMS OF REFERENCE
(CONSULTING FIRM)

Consultancy Services to Engage a Consultancy Firm to Undertake a Feasibility Study, Develop Concept Design, and to Supervise the Installation of a Utility Scale Solar Photovoltaic Plant with Battery Energy Storage System

Institution:	**Ministry of Finance, Government of Belize**
Country:	**Belize, Central America**
Loan No.:	**2/801**
Project Name:	**Construction of Solar Energy Plant Project, Belize**
RFP No.:	**RFP/SFD/2/801/02**
Duration:	**Twenty – One (21) Months**

1. BACKGROUND

Belize Electricity Limited (BEL) is the primary distributor, transmitter, and generator of electricity in Belize, Central America. The Company serves a customer base of approximately 113,698 accounts with aggregate energy sales of 705.2 gigawatt-hours (GWh) and a peak power demand of 129.2 megawatts (MW) as of 2024[1]. BEL's installed generation capacity stands at approximately 55 MW of owned backup thermal generation, with total in country available capacity around 135 MW, comprising hydroelectric approximately 55 MW from sources like Chalillo, Mollejon, Vaca dams, and Hydro Maya; biomass approximately 21.5 MW from BELCOGEN, Santander Sugar Energy, and Blair Athol Power Company Limited; solar photovoltaic (PV) approximately 5 MW from various small scale installations; and non-renewable thermal generation of approximately 41.5 MW for reliability, plus off-grid systems adding minor capacity.[2] Additionally, Belize relies on significant electricity imports from Mexico via bilateral agreements with Comisión Federal de Electricidad (CFE), with import capacity up to 55 MW, accounting for approximately 50% of annual supply on average, presenting a competitive least cost option but also introducing supply volatility.

Belize's Least Cost and Least Risk System Expansion Plan (LCEP) 2022-2042, developed by Siemens PTI for BEL, projects energy demand growth at an average of approximately 6.5% annually, driven by population growth, economic development, increasing electrification, tourism expansion, and the introduction of electric vehicles and e-mobility. Peak demand has risen from 127.2 MW in 2023 to 129.2 MW in 2024, with projections indicating potential shortfalls starting in 2026 where expected peak demand may exceed available in country generation capacity if additional renewables and storage are not integrated promptly. A revision of the LCEP is underway through a special electricity committee to develop a national electrical energy mix master plan.

The energy sector has committed projects under implementation, including expansions in solar PV and battery storage, such as a recent 15 MW solar PV plant with 1.5 MW/3 MWh battery energy storage system (BESS) under a Power Purchase Agreement (PPA) with BAPCOL, set for

[1] https://www.bel.com.bz/Company_Information.aspx
[2] https://www.mpuele.gov.bz/wp-content/uploads/2024/11/Energy-Report-2023_Digital-Copy_Final.pdf

commissioning in 2026. The current grid network faces challenges from intermittent renewable energy sources, particularly solar PV, which has seen significant growth. While this displaces expensive imports and fossil-based generation, it introduces variability, especially during peak solar hours when excess energy may lead to curtailment or instability. The Transmission System Integration Analysis for Solar PV Power Plants, incorporated within the LCEP framework, highlights the need for enhanced grid integration to manage high penetration of variable renewables, recommending storage solutions to balance supply and demand, improve reliability, and reduce reliance on imports.

Another concern is grid stability. Intermittent solar PV requires compensatory mechanisms, such as energy storage, to provide ancillary services and maintain frequency and voltage stability. According to the LCEP, solar PV and wind are the most economic utility scale resources for energy delivery, but capacity needs require firming technologies like BESS to ensure reliability. The plan emphasizes increasing in country renewable capacity to reduce imports and achieve 75% renewable energy generation by 2030, as outlined in Belize's National Energy Policy 2023. Non-renewable sources have declined, but volatility persists, with greenhouse gas removals increasing due to renewable projects.

Based on these recommendations, utility scale solar PV paired with BESS will be crucial for energy shifting, peak shaving, and ancillary services, supporting Belize's goal of reducing energy intensity by 25% and increasing renewable penetration from 35% to 75% by 2030[3].

The Government of Belize (GoB), with financing from the Saudi Fund for Development (SFD), has initiated a project for integrated solar PV and BESS to store excess solar energy, assist in load balancing, and offer ancillary services. The project intends to install 40MW of solar PV plant with 20MW/ 80MWh BESS between a proposed 55-hectares site **(coordinates: 17.884232,-88.320301)** and a proposed 150-hectares site **(coordinates: 17.86248,-88.28911)** both located within the vicinity of Maskall Village, Belize District.

2. OBJECTIVES OF THE CONSULTANCY

The main objectives of the Consultancy will be to confirm the need for the installation of integrated solar PV and BESS; identify and compare the different types of solar PV and BESS integrated systems; determine and confirm the size and sites for the installation of integrated solar PV and BESS storage systems; prepare tender documents for procuring an engineering, procurement, and construction (EPC) contractor; review and recommend approval of EPC contract designs; and supervise construction, commissioning, and acceptance of the completed installations.

The specific objectives of the Consultancy are as follows:

i. Analyze the need for solar PV and BESS and update findings from the LCEP;

ii. Analyze impacts of solar PV and BESS installation on grid stability, load balancing, and transmission efficiency;

[3] https://www.mpuele.gov.bz/wp-content/uploads/2023/11/Belize-National-Energy-Policy-2023.pdf

iii. Analyze solar PV and BESS installation, with support of simulations using planning software, to determine suitability for ancillary services and energy shifting;

iv. Confirm optimal solar PV and BESS capacity for each site, and identify suitable technology, sizing, and optimal layout and locations;

v. Conduct site investigations including solar resource assessments, topographical surveys, and geotechnical investigations;

vi. Undertake grid study with power systems simulations for load flow, fault analysis, and stability;

vii. Develop conceptual designs and advise on implementation strategy;

viii. Carry out an environmental and social impact assessment (ESIA) for both sites to identify environmental and social risks and impacts and proposing practical and effective mitigation measures, in compliance with Belize's Environmental Protection Act.

ix. Undertake a financial and economic analysis including calculations of Net Present Value (NPV), Internal Rate of Return (IRR), Levelized Cost of Energy (LCOE), and sensitivity to import prices from CFE;

x. Carry out risk analysis and mitigation strategies based on installations, and develop a comprehensive implementation plan;

xi. Develop specifications and bid documents for an EPC contractor for solar PV and BESS development;

xii. Develop storage capacity, operations, and maintenance agreements, including any relevant power purchase agreements in consultation with the Public Utilities Commission of Belize;

xiii. Assist with pre-bid meetings and answering queries as it relates to bidding processes;

xiv. Assist in the evaluation of bids received and assist with the preparation of a bid evaluation report;

xv. Assist in contract award discussions, negotiations, and signing of the contract;

xvi. Review and recommend approval of all solar PV, BESS, civil, and electrical designs and drawings developed by the EPC contractor;

xvii. Monitor and supervise all activities undertaken by the EPC contractor;

xviii. Certify all payment applications submitted by the EPC contractor;

xix. Submit a compliance report on the supply, installation, testing, and commissioning of each solar PV plant and BESS installations;

3. SCOPE OF SERVICES

The Consultant shall perform the following tasks in alignment with the objectives of the Consultancy, divided into three phases:

i. **Phase 1 - Feasibility and Design** *(Months 1-6)*;

ii. **Phase 2 - Procurement Support** *(Months 7-9)*; and

iii. **Phase 3 - Supervision and Handover** *(Months 10-21)*;

Phase 1 – Feasibility and Design

i. The Consultant shall review the LCEP, and other relevant documents. This includes updating data on demand growth, renewables penetration, import reliance, and grid challenges. The analysis must justify the 40 MW solar PV and 20 MW/80 MWh BESS installations by quantifying benefits.

ii. The Consultant shall assess operational impacts, including variability reduction, peak shaving potential, energy shifting from daytime to evening peaks, and effects on transmission losses. This involves modeling scenarios for both sites and its connection to BEL's substation located in Maskall Village. The assessment shall evaluate the optimal location for BESS installation, considering efficiency and effectiveness at the solar PV plant sites or the Maskall Village substation. The assessment shall also evaluate the integration of the solar PV plants and BESS with existing hydro and biomass systems, and identifying risks like overvoltage or frequency deviations.

iii. Using software like ETAP, the Consultant shall run dynamic simulations for frequency regulation, voltage support, black start capabilities, and 4-hour energy shifting. Simulations must cover base, high-demand, and fault scenarios, validating suitability against grid codes, with results documented, including graphs, error margins, and optimization recommendations.

iv. The Consultant shall optimize capacities using resource data and simulations, recommending technologies, sizing, layouts, and site allocations. This includes cost-benefit analysis for alternatives, with a final optimization results and site-specific maps.

v. The Consultant shall perform site surveys at both sites, assessing solar irradiance, topography using LiDAR technology for elevation maps, and geotechnical assessments for optimal civil works design.

vi. The Consultant shall conduct load flow, fault, and stability studies using ETAP modeling interconnections to the national grid. This includes N-1 contingency analysis, with mitigation strategies, documented with diagrams and compliance certifications.

vii. The Consultant shall create conceptual designs including single-line diagrams, equipment specifications, and layouts, including all civil works aspects (i.e. drainage, site fencing,

foundations, pads, etc.), advising on phased implementation. Strategy must cover timelines, budgeting, and integration with any ongoing projects.

viii. The Consultant shall conduct a full ESIA with baseline surveys, stakeholder consultations, risk identification, and mitigation plans. Compliance with local laws is required.

ix. The Consultant shall perform economic analysis using assumptions calculating NPV, IRR, LCOE, and sensitivities. Economic benefits shall be included, such as job creation and greenhouse gas savings.

x. The Consultant shall identify risks such as grid instability, cost overruns, delays from permits, and solar PV and BESS acquisition issues with probability impact matrices, mitigation strategies, and a plan. with Gantt charts, milestones, and responsibilities.

Phase 2 – Procurement Support

xi. The Consultant shall prepare technical specifications, bidding documents, and contracts compliant with SFD guidelines, with complete tender package.

xii. The Consultant shall draft agreements covering capacity guarantees, operations and maintenance protocols, performance metrics, and power purchase agreements, customized for BEL, with legal reviews and final drafts.

xiii. The Consultant shall organize and facilitate in-person pre-bid meetings, prepare agendas, respond to all queries, and document clarifications, ensuring transparency in the procurement process.

xiv. The Consultant shall assist in evaluating bids and assist in preparing a bid evaluation report with recommendations for contract award.

xv. The Consultant shall support contract negotiations, draft amendments, facilitate discussions with shortlisted bidders, and oversee contract signing.

Phase 3 – Supervision and Handover

xvi. The Consultant shall review detailed solar PV, BESS, civil, and electrical designs against specifications and recommend revisions and approvals.

xvii. Monitor and supervise all activities undertaken by the EPC contractor: The Consultant shall conduct weekly site inspections to monitor compliance with contract conditions, and maintain daily logs, with monthly supervision reports.

xviii. The Consultant shall verify completed works and approve payments with payment certificates that are submitted to the GoB for processing.

xix. The Consultant shall compile a compliance report verifying adherence to designs, standards, ESIA mitigations, and performance tests.

xx. The Consultant shall deliver a two (2) week training program for at least 15 persons, covering solar PV and BESS operations, maintenance, safety, and software use, with materials, certificates, and evaluations.

4. DELIVERABLES

The Consultant shall submit the following deliverables in English within the specified timelines:

Deliverable 1 - Inception Report

The Inception Report shall be submitted by the end of Month 1 following contract signing and mobilization. It serves as the initial deliverable to outline the Consultant's understanding of the project, methodology, and work plan, ensuring alignment with the established requirements. Based on the overall scope, the Inception Report shall include:

i. A detailed work plan for all phases, including timelines, milestones, resource allocation, and dependencies.

ii. Team composition, including key experts' roles, mobilization schedule, and local Belizean participation.

iii. Preliminary risk assessment and mitigation strategies.

iv. Methodology overview for key activities.

v. Stakeholder engagement plan, including initial consultations for ESIA.

vi. Budget breakdown and reporting arrangements.

vii. Any initial findings from document reviews.

The report shall be submitted in PDF and Microsoft Word format with an executive summary and annexes. Approval of the report shall be attained before proceeding to Phase 1 activities.

Deliverable 2 - Feasibility Report

The Feasibility Report shall be a comprehensive compilation submitted by the end of Month 6, integrating outputs from Phase 1 to confirm project viability, optimal design, and implementation strategy. It justifies the 40 MW solar PV and 20 MW/80 MWh BESS installations, including site specific recommendations for both sites, and evaluates BESS placement options at solar sites or at the Maskall Village substation for efficiency and effectiveness. The Feasibility Report shall include:

i. Updated energy demand analysis, renewable penetration, import reliance, and grid challenges, with quantified benefits and data visualizations.

ii. Operational impact assessment, including variability reduction, peak shaving, energy shifting, transmission losses, integration with hydro/biomass, and risks, with quantitative metrics and BESS location recommendations.

iii. Dynamic simulation results for ancillary services and 4-hour energy shifting, including graphs, error margins, base/high-demand/fault scenarios, and optimization suggestions compliant with grid codes.

iv. Optimized capacities, technologies, sizing, layouts, and site allocations, with cost benefit analysis and maps.

v. Site investigation findings, including solar irradiance, LiDAR topography maps, geotechnical data, risk assessments, raw data, photos, and suitability ratings.

vi. Grid studies with load flow, fault, stability analysis, N-1 contingencies, mitigation strategies, diagrams, and compliance certifications.

vii. Conceptual designs, including single-line diagrams, equipment specifications, civil works designs for drainage, fencing, foundations, pads, etc., phased implementation strategy, timelines, budgeting, and integration with existing solar PV projects.

viii. Full ESIA with baseline surveys, stakeholder consultations, risks and impacts, mitigation plans, and compliance with Belize's Environmental Protection Act.

ix. Financial and economic analysis, including NPV, IRR, LCOE, sensitivities, and economic benefits.

x. Risk analysis with probability and impact matrices, mitigations, and implementation plan with Gantt charts, milestones, and responsibilities.

The report shall be submitted in PDF and Microsoft Word format and shall be structured with an executive summary, main body, annexes, data visualizations, including Gantt charts, load flow diagrams, and performance graphs, and recommendations for proceeding to procurement.

Deliverable 3 - Procurement Package

The Procurement Package shall be submitted by the end of Month 7, comprising all documents needed for international competitive bidding of the EPC contractor. The procurement package shall include:

i. Technical specifications for solar PV, BESS, civil and electrical works, and grid integration, informed by Phase 1 outputs.

ii. Bidding documents, including instructions to bidders, evaluation criteria, forms, and schedules.

iii. Draft EPC contract templates, incorporating capacity guarantees, performance metrics, and clauses for risks and mitigations.

iv. Supporting annexes, such as site data, conceptual designs, ESIA summaries, and financial assumptions.

v. Preliminary drafts of related agreements, including storage capacity, operations and maintenance protocols, and power purchase agreements customized for BEL.

The procurement package shall be submitted in PDF and Microsoft Word format and shall support all bidding activities and contract negotiations.

Deliverable 4 - Monthly Supervision Reports

Monthly Supervision Reports shall be submitted during Months 10 to Month 21, to track the EPC contractor's progress, compliance, and any issues related to the solar PV and BESS installation. Each report shall document the previous month's activities and include:

i. Summary of site inspections, progress against milestones, and deviations from designs and specifications.

ii. Monitoring of EPC activities, including quality control, safety compliance, and environmental mitigations.

iii. Verification of completed works, payment applications certified, with supporting evidence, and recommendations for approvals.

iv. Updated risk status, mitigation actions, and forecasts for next month.

v. Quantitative metrics based on work completed in MW installed, budget spent, and schedule variance.

vi. Annexes with photos, test results, and updated Gantt charts.

Reports shall be submitted in PDF and Microsoft Word format.

Deliverable 5 - Compliance Report

The Compliance Report shall be submitted by the end of Month 21, serving as the final verification of project completion, commissioning, and handover for the solar PV and BESS installations. The Compliance Report shall include:

i. Verification of adherence to all designs, specifications, and standards.

ii. Confirmation of ESIA mitigations implemented, with monitoring data.

iii. Results from performance tests and commissioning trials.

iv. Documentation of all supervision activities, including resolved issues from monthly reports, payment certifications, and defect resolutions.

v. As-built drawings, operation manuals, and handover checklists.

vi. Quantitative outcomes based on financial and economic analysis.

vii. Lessons learned, risks encountered and mitigated, and recommendations for operations and maintenance.

viii. Photos, data logs, and compliance certifications.

The report shall be submitted in PDF and Microsoft Word format and shall be structured with an executive summary, main body, annexes, data visualizations, etc.

Deliverable 6 - Training Report

The Training Report shall be submitted two (2) weeks after the training activity, documenting the capacity building delivered to at least 15 persons on solar PV and BESS operations and maintenance. The Training Report shall include:

i. Program overview, including agenda, duration, participants, and delivery methods.

ii. Content coverage which shall include solar PV operations, BESS specifics, maintenance protocols, software use, and integration with the national grid.

iii. Training materials provided as annexes.

iv. Evaluation results which shall include ex-ante and ex-post training assessments, participant feedback surveys, certificates issued, and knowledge gaps addressed.

v. Recommendations for ongoing training or refresher sessions, linked to operations and maintenance agreements.

vi. Alignment with project risks and benefits.

The report shall be submitted in PDF and Microsoft Word format.

5. EXPECTED DELIVERABLES TIMELINE

Deliverable	Milestone	Timeline for Submission
Deliverable #1 Inception Report	Upon Acceptance of Inception Report by the CEU	Within **1 month** of commencement of services
Deliverable #2 Feasibility Report	Upon acceptance of Feasibility Report by the CEU	Within **6 months** of commencement of services
Deliverable #3 Procurement Package	Upon signing of EPC contract with the CEU	Within **9 months** of commencement of services
Deliverable #4 Monthly Supervision Reports	Upon achieving certified 50% completion of EPC activities	Within **15 months** of commencement of services
Deliverable #5 Compliance Report	Upon acceptance of Compliance Report by the CEU	Within **21 months** of commencement of services
Deliverable #6 Training Report	Upon acceptance of Training Report by the CEU	Within **21 months** of commencement of services

6. CONSULTANT'S QUALIFICATIONS AND EXPERTISE

Mandatory Requirements: Criteria designated as "shall" must be fully met by participants. Failure to satisfy any mandatory requirement will result in the rejection of the proposal.

Exceeding Minimum Standards: Additional points will be awarded to consultants who demonstrate qualifications and experience that exceed the minimum required criteria, enhancing the overall quality of the proposal.

Consultant's Qualifications and Experience:

i. The Consultant shall possess a minimum of ten (10) years of experience in designing and supervising the development of renewable energy projects, including at least three (3) completed solar PV installations of 10 MW or greater, each integrated with BESS.

Key Experts: The Consultant shall provide the following key experts for the assignment, each possessing the necessary skills and qualifications to ensure the highest quality of services:

Team Leader/ Electrical Engineer

i. Shall possess a minimum of a Bachelor of Science Degree in Electrical Engineering or a related field.

ii. Shall possess a minimum of 15 years of experience in power systems and renewables project management.

iii. Shall possess a minimum of 10 years of specific experience in solar PV and BESS, leading at least two (2) utility scale projects in high renewable grids.

iv. Prior experience as a Team Leader or Electrical Engineer in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

Solar PV Specialist

i. Shall possess a minimum of a Bachelor of Science Degree in Electrical Engineering, Renewable Energy, or a related field, or hold industry recognized certifications in solar technology, such as NABCEP (North American Board of Certified Energy Practitioners), IEEE Professional Certification, or equivalent credentials demonstrating expertise in solar technology.

ii. Shall possess a minimum of 15 years of experience in renewable energy.

iii. Shall possess a minimum of 10 years of specific experience in solar PV design and resource assessment for at least two (2) utility scale projects.

iv. Prior experience as a solar PV specialist in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

BESS Specialist

i. Shall possess a minimum of a Bachelor of Science Degree in Electrical Engineering, Renewable Energy, or a related field, or hold industry recognized certifications in BESS technology, such as NABCEP (North American Board of Certified Energy Practitioners), IEEE Professional Certification, or equivalent credentials demonstrating expertise in BESS technology.

ii. Shall possess a minimum of 15 years of experience in energy storage or power systems.

iii. Shall possess a minimum of 10 years of specific experience in designing BESS for at least two (2) projects, focusing on ancillary services and energy shifting.

iv. Prior experience as a BESS specialist in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

Civil Engineer

i. Shall possess a minimum of a Bachelor of Science Degree in Civil Engineering or a related field.

ii. Shall possess a minimum of 15 years of experience in civil infrastructure design.

iii. Shall possess a minimum of 10 years of specific experience in power system infrastructure for at least two (2) utility scale projects.

iv. Prior experience as a Civil Engineer in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

Environmental and Social Specialist

i. Shall possess a minimum of a Bachelor of Science Degree in Environmental Engineering, Environmental Sciences, Natural Resource Management or a related field.

ii. Shall possess a minimum of 15 years of experience in environmental and social impact assessments for infrastructure projects.

iii. Shall possess a minimum of 10 years of specific experience in environmental and social impact assessments for renewable energy projects of 10MW or greater.

iv. Prior experience as an Environmental and Social Specialist in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

Financial Analyst

i. Shall possess a minimum of a Bachelor of Science Degree in Finance, Economics, Business Administration, or a related field.

ii. Shall possess a minimum of 15 years of experience in financial analysis for energy projects.

iii. Shall possess a minimum of 10 years of specific experience in LCOE, NPV, IRR modeling for at least 2 renewable energy projects.

iv. Prior experience as a Financial Analyst in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

Procurement and Contracts Expert

i. Shall possess a minimum of a Bachelor of Science Degree in Supply Chain Management, Business Administration, Procurement, Engineering, or a related field, or hold industry recognized certifications such as CPSM, CIPS, or equivalent credentials demonstrating expertise in procurement and contract management.

ii. Shall possess a minimum of 15 years of experience in procurement for EPC contracts.

iii. Shall possess a minimum of 10 years of specific experience in EPC bidding for at least 2 utility scale solar PV projects.

iv. Prior experience as a Procurement and Contracts Expert in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

Clerk of Works

i. Shall possess a minimum of a Bachelor of Science Degree in Civil Engineering, Construction Management, Electrical/ Mechanical Engineering or a related field.

ii. Shall possess a minimum of 15 years of experience in construction supervision.

iii. Shall possess a minimum of 10 years of specific experience in supervising at least two (2) utility scale renewable energy projects.

iv. Prior experience as a Clerk of Works or Works Supervisor in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

Training Specialist

i. Shall possess a minimum of a Bachelor of Science Degree in Electrical Engineering, Renewable Energy, or a related field, or hold industry recognized certifications in BESS technology or solar technology, such as NABCEP (North American Board of Certified Energy Practitioners), IEEE Professional Certification, or equivalent credentials demonstrating expertise in BESS and/or solar technology.

ii. Shall possess a minimum of 10 years of experience in capacity building for technical projects.

iii. Shall possess a minimum of five (5) years of specific experience in training in BESS and energy systems.

iv. Prior experience as a Training Specialist in Latin America and the Caribbean Region is considered an asset.

v. Shall demonstrate proficiency in both written and spoken English.

7. SUPPORT STAFF

Support staff shall include LiDAR survey specialists, legal experts for the drafting of agreements, geotechnical engineers, quantity surveyors, and administrative support to fulfill the scope of services.

8. COMPOSITION OF KEY EXPERTS AND THEIR TIME CONTRIBUTION

The time contribution of these experts is indicative and serves as a basis for estimating the Consultant's level of effort for the assignment.

No.	List of Key Experts	Phase 1 (Person-Months)	Phase 2 (Person-Months)	Phase 3 (Person-Months)	Total (Person-Months)
1	Team Leader / Electrical Engineer	6	3	12	21
2	Solar PV Specialist	5	1	3	9
3	BESS Specialist	5	1	3	9
4	Civil Engineer	4	0.5	4	8.5
5	Environmental and Social Specialist	4	0	1	5
6	Financial Analyst	3	0	0.5	3.5
7	Procurement and Contracts Expert	1	3	1	5
8	Clerk of Works	0	0	12	12
9	Training Specialist	0	0	1	1
Total Estimated Level of Effort		**28**	**8.5**	**37.5**	**74**

9. DURATION OF CONSULTANCY

The Consultancy shall be implemented over a period of approximately 21 months.

10. PAYMENT SCHEDULE

The contract shall be executed as a lump sum contract, with payments tied to the submission and acceptance of deliverables, as follows:

Deliverable	**Milestone**	**Percentage of Contract Value**	**Timeline for Submission**
Inception Report	Upon Acceptance of Inception Report by the CEU	10%	Within **1 month** of commencement of services
Feasibility Report	Upon acceptance of Feasibility Report by the CEU	30%	Within **6 months** of commencement of services
Procurement Package	Upon signing of EPC contract with the CEU	25%	Within **9 months** of commencement of services
Monthly Supervision Reports	Upon achieving certified 50% completion of EPC activities	10%	Within **15 months** of commencement of services
Compliance Report	Upon acceptance of Compliance Report by the CEU	20%	Within **21 months** of commencement of services
Training Report	Upon acceptance of Training Report by the CEU	5%	Within **21 months** of commencement of services