



ELECTRICITY GENERATION COMPANY OF BANGLADESH LIMITED

ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified

Unique Heights (Level-13, 14 & 15), 117, Kazi Nazrul Islam Avenue, Eskaton Garden, Dhaka-1217.

Tel:- 55138633-36 (PABX), Fax:- 880-2-55138637, E-mail: info@egcb.com.bd, Web: egcb.gov.bd

Request for Expression of Interest [Firm (International)] for

Selection of Consultants for Design Review, Supervision and Monitoring Consultancy Services (Owner's Engineer or OE)

Employer: Electricity Generation Company of Bangladesh (EGCB) Limited

Project: Sonagazi 220 MW Solar Power Plant Construction Project (Sonagazi 220 MW Solar Power and Livelihoods Improvement Project)

Contract Title: Firm for providing services as Consultant for Design Review, Supervision and Monitoring of EPC Contractor (Owner's Engineer or OE) (SD1 Package) at Sonagazi under Feni District.

Country: Bangladesh

Mode of Financing: Forward Lease, Loan and Grant

EOI No: 27.27.2666.000.102.05.0016.24.135 Date: 11/01/2026

Issued on: 11/01/2026

1. The Government of the People's Republic of Bangladesh has applied for financing from the Islamic Development Bank (IsDB) toward the cost of the Sonagazi 220 MW Solar Power Plant Construction Project (Sonagazi 220 MW Solar Power and Livelihoods Improvement Project), a project of Power Division, Ministry of Power, Energy and Mineral Resources & implemented by Electricity Generation Company of Bangladesh (EGCB) Ltd., and intends to apply part of the proceeds for consulting services.
2. The consulting services ("the Services") are to assist the client in:
 - (i) implementing a turnkey contract of at least 220 MWac Solar Power Plant through an EPC Contractor from design, procurement, supply, installation & erection, testing and commissioning;
 - (ii) compliance with IsDB health, safety, environmental and social safeguard standards and reporting;
 - (iii) implementing livelihood improvement component of the Project; and
 - (iv) operating the plant to achieve its predicted/guaranteed output and design life up to Defect Liability Period (DLP) of 1 year.

The project period will be 3 years from 1 July 2025 to 30 June 2028 and duration of the service is 30 months. The proposed service requires 85 (eighty-five) Person-months of professional inputs including 28 (twenty-eight) Person-months of international professional inputs. The service is expected to commence from May 2026.

The detailed Terms of Reference (ToR) for the assignment can be found at the following website:

<https://www.egcb.gov.bd/>.

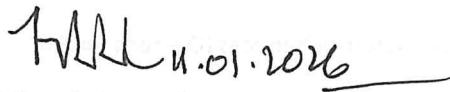
3. The EGCB now invites eligible consulting firms ("Consultants") to indicate their interest in providing the services. Interested Consultants must provide specific information which demonstrates that they are fully qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.). The short-listing criteria are:
 - (a) General experience of the Firm(s); [Firm shall have general experience of at least 5 years]
 - (b) Experience in similar Solar PV Projects of compatible size, complexity and technical specialty in the required area; [Firm shall have experience of providing consultancy services (i.e., services for design review, supervision and monitoring) in at least 1 project of at least 50 MWac capacity]
 - (c) Experience in MDB Financing Project; and
 - (d) Technical and managerial capability based on the number of permanent staff of the firm.

Key Experts will not be evaluated at the shortlisting stage.

Consultants are requested to submit the following supporting documents in support of the above-mentioned criteria:

- (a) Registration paper/Incorporation documents of the firm (s); (b) JV agreement/letter of intent (if applicable); (c) Firm's brochure; (d) Firm's staffing and management structure; (e) service experience record (including nature, total cost, total input in terms of man month, employer, location of service etc.); (f) similar Solar PV Projects experience record (including nature, total cost, total input in terms of man month, employer, location of service etc.);
4. The attention of interested Consultants is drawn to Part 01, Chapter 01 paragraphs 1.12.1 and 1.12.2 of the Procurement Policy of the Guidelines for the Procurement of Consultancy Services under Islamic Development Bank Project Financing April 2019 (Revised February 2023) (the "Procurement Guidelines"), setting forth IsDB's policy on conflict of interest.
5. Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected.
6. A consultant will be selected in accordance with the Quality and Cost Based Selection (QCBS) method set out in the Procurement Guidelines.

7. Interested consultants may obtain further information at the address below during office hours (10.00 a.m to 5.00 p.m.) (local time).
8. Expression of Interest must be delivered in a written form to the address below (in person, or by mail, or by fax, or by e-mail) by February 03, 2026, 15:00 hr (Bangladesh Standard Time).

 11.01.2026

Mir Md. Zinnat Ali
Executive Director (Planning & Development)
Sonagazi 220 MW Solar Power Plant Construction Project
Electricity Generation Company of Bangladesh (EGCB) Ltd.
Unique Heights (Level-14, 15 & 16), 117 Kazi Nazrul Islam Avenue,
Eskaton Garden, Dhaka-1217
E-mail: zinnat@egcb.com.bd
Website: www.egcb.gov.bd

Terms of Reference

for

**Selection of Consultants for
Design Review, Supervision
and Monitoring Consultancy
Services**

January 2026

Section 7. Terms of Reference

1. Background

The Government of Bangladesh (GoB) has set a target to increase substantially the share of renewable energy in the global energy mix by 2030. The Renewable Energy Policy 2025 of Bangladesh has a target of generating 20% of total electricity from renewable energy (RE) sources by 2030 (1st phase). In line with the Government, Electricity Generation Company of Bangladesh (EGCB) Ltd. (the “Client”) intends to implement a 220 MW Solar Power Plant Project at Sonagazi upazila, Feni Zilla, Chattogram Division of Bangladesh.

Stable and secured power supply is one of the preconditions for faster economic growth of the Country. Taking this into cognizance the government has prepared long term power generation plan to generate 40,000 MW of electricity by 2030 & 60,000 MW of electricity by 2041.

The Client has taken diversified initiatives for development of various RE power generation projects. The Client acquired 999.65 acres of land at Purbo Borodholi Mouza of Sonagazi upazila under Feni district for development of various renewable energy based power generation projects. Part of the acquired land will be used to implement Sonagazi 220 MW Solar Power Plant Construction Project (Sonagazi 220 MW Solar Power and Livelihoods Improvement Project). The Client already constructed 75 MW solar power plant and 230 kV 13.3 km transmission line along with associated GIS bay through WB finance within the acquired land (located at adjacent west side of this Project area).

In this context, the Client has sought Islamic Development Bank’s (IsDB) assistance through GoB to develop Sonagazi 220 MW solar power plant construction project (IsDB Sonagazi 220 MW Solar Power and Livelihoods Improvement Project) at Sonagazi in Feni District (the “Project”). The facility will include construction of a solar power plant of at least 220 MWac (the “Plant”) capacity and construction of 2nd Circuit of existing 230 kV 13.3 km transmission line along with associated 230 kV GIS bay extension at PGCB’s Mirsarai BEZA 230 kV Grid-substation and AIS bay construction at 75 MW Solar Plant going to be built under a Design, Supply, Installation, Testing, Commissioning Contract (EPC Contract).

The Project area is collocated with 75 MW solar power plant within EGCB acquired land. Challenges of the project site were successfully addressed and mitigated during 75 MW Project implementation. EGCB is experienced to tackle site challenges.

The Client is currently in the process of tendering the Design, Supply, Installation, Testing, Commissioning Contract (EPC Contract) of Sonagazi 220 MW solar power plant construction project and wishes to engage a Consultant for Design Review, Supervision and Monitoring of EPC Contractor (the “Consultant”) to assist Client in the Project and monitor the works of the EPC contractor (the “Contractor”).

2. Objective(s) of the Assignment



The main objectives of this assignment are to assist the Client in:

- (i) implementing a turnkey contract of at least 220 MWac Solar Power Plant through an EPC Contractor from design, procurement, supply, installation & erection, testing and commissioning;
- (ii) compliance with IsDB health, safety, environmental and social safeguard standards and reporting;
- (iii) implementing livelihood improvement component of the Project; and
- (iv) operating the plant to achieve its predicted/guaranteed output and design life up to Defect Liability Period (DLP) of 1 year.

3. Scope of Services, Tasks (Components) and Expected Deliverables

3.1 General Scope of Services

To achieve the objectives defined in 2, the Client intends to procure the services of a Consultant for Design Review, Supervision and Monitoring of EPC Contractor (Owner's Engineer or OE) that will review the design and monitor the quality and progress of the project throughout all its phases: preconstruction, construction, commissioning and operation (up to Defect Liability Period of 1 year). Client also intends to procure the services for supervision and monitoring of livelihood improvement component implementation under the Project.

The tender for the EPC contract will be done in parallel, so the mobilization of the OE will be coordinated with the EPC Contractor ("the Contractor"). The expected duration of the services is 30 (Thirty) months, covering DLP of 1 year.

3.2 Detailed Scope of Services

The following description attempts to outline the Consultant's tasks during execution of his services in suitable detail. However, the Consultant shall bear in mind that the list of tasks and activities can by no means be considered as a complete and comprehensive description of the Consultant's duties. It is rather the Consultant's responsibility to verify critically the scope of services indicated and to extend, reduce or amend it, wherever he deems necessary according to his own professional judgment and the knowledge he will acquire during the preparation of his proposal. It is understood that the Consultant will carry out any other work as deemed necessary to achieve the programmed objectives. The Consultant shall allocate and ensure sufficient time of relevant experts in field (as mentioned in sl. 4) for smooth supervision of the EPC Contract and timely achievement of the objectives. Consultant shall allocate maximum two experts for performing services during DLP.

3.2.1 Phase 1 - Preliminary works

The Consultant will be required to perform the following functions:

3.2.1.1 Phase 1 - Task 1.

No later than three weeks after commencement, the Consultant will attend a kick-off meeting with the Client, and other stakeholders that may be required. The participants in the meeting will review the work plan in line with the EPC Contract, refine the work



disaggregation schedule, update submission dates for each deliverable, and assign the personnel by name and time dedication to each task. The Consultant will design a Women & Youth KPI Framework during this phase for livelihood improvement component, which will serve as the foundation for monitoring all livelihood, inclusion, gender equity, and youth development results throughout the project.

Deliverables for Phase 1 – T1

D1. Inception Report (see 5.1 in this Section for description)

3.2.2 Phase 2 – Pre-construction Activities

3.2.2.1 Phase 2 – Task 1

Once the EPC contractor starts the submission of the Design documentation, the Consultant will carry out the project vetting of all the Contractor's submitted documentation and samples (if any). This will include, but not be limited to, the following functions:

- Review and recommend to approve all necessary drawings, analyses and calculations for all permanent structures prepared by the Contractor (buildings, foundations, structures, dikes, buildings, drains etc.);
- Review and recommend to approve all electric drawings and calculations including the high-voltage interconnection;
- Review and recommend to approve all the water management infrastructure design including drains, dikes, internal roads, culverts, sluice gates, pumps and any other related equipment that may be included in the Contractor's design;
- Review and recommend to approve the engineering design, fabrication, erection and assembly drawings for solar field, electrical equipment and interconnection prepared by the Contractor,
- Check and recommend to approve fabrication and assembling drawings of the remaining part of the plant prepared by the Contractor,
- Review and recommend to approve of construction design prepared by the Contractor, prior to the Client's endorsement.
- Review the Project's work schedule to identify the critical path, main risks and suggested palliation;
- Review of the EHS -management plan to be implemented by the Contractor, under the responsibility of the Client (environmental, health and safety aspects);
- Review and recommend to approve the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions
- Review and recommend to approve ESHS provisions of method statements, implementation plans, GBV/SEA prevention and response action plan, drawings, proposals, schedules and all relevant Contractor's documents;
- Review and recommend to approve the Contractor's training program for women and youth development including criteria for selection of trainers and target beneficiaries.
- Review of the EHS monitoring plan for the Client for the further operation of the PV plant;
- Support to the Client in the financial management (disbursements plan) of the project;



- Issue Project Vetting report to include above items and any other aspect that may be found critical during the review.

Approvals / Rejections will fall into three categories:

- Recommended to approve without comments
- Recommended to approve with comments that must be complied with during project execution
- Rejected – to be re-submitted

Consultant will carry out supervision and monitoring of primary activities related to livelihood improvement component implementation.

Deliverables for Phase 2 – T1

Monthly¹ Project Vetting Report (see 5.2 in this Section for description)

3.2.2.2 Phase 2 – Task 2

Witnessing of Factory Acceptance Tests will be performed as per EPC Contract at the country of origin of major equipment at Client's cost. Representatives of the Consultant will carry out Witnessing of Factory Acceptance Tests only if requested by the Client.

The Consultant, if requested by Client, shall carry out Witnessing of Factory Acceptance Tests and be responsible for quality assurance of all major equipment such as PV modules, inverters, transformers, metal frames, support structures and trackers (if applicable) as well as GIS bay equipment of 2nd circuit interconnection line and material to be supplied under the EPC Contract. The specific items to be tested and the methods to be used will be agreed between the Client and the Contractor beforehand.

The Consultant, along with Client's personnel, shall witness the determined factory tests in order to ensure a strict follow up of the testing procedure; including certifications-related tests performed by third parties. It is not required to permanently assign an inspector in the manufacturer country. Inspection and witnessing of factory tests shall be done periodically as agreed with the Client.

The Consultant price proposal for factory test witnessing shall include all Consultant personnel expenses, travel, hotel and allowance expense (for minimum of 2 trips and accommodation 5 days per travel) as a single and separate item in budget. Written report shall be provided by the Consultant on each test witnessed by the Consultant or together with the Client. Factory tests are optional, and they will only take place if the Client considers them relevant for the project or for capacity building.

The inspection and factory test witnessing includes all major plants and equipment and critical material for the project, at least but not limited to the transformer, inverters, solar PV modules, GIS and AIS bay equipment.

¹ The report will be updated as long as there are new submittals from the Contractor



The equipment to be supplied under this project will be subject to random sampling and the selected items should be tested in a certified testing station. Tests will be financed by the Contractor by witness of the Consultant and the Client.

The procedure for testing should be prepared by the manufacturer/contractor in coordination with the Consultant and should be reviewed and submitted to the Clients before 4 weeks of the test.

The Consultant is expected to:

- Review and recommend to approve proposals on quality assurance program and delivery program prepared by the Contractor;
- Monitor to ensure timely manufacturing and testing by means of periodical inspection in accordance with the approved construction schedules;
- Provide periodical review of production schedules and delivery schedules by the Contractor;
- Review and recommend to approve factory testing procedures submitted by the Contractor;
- Monitor to ensure the Contractor's workmanship in accordance with the specification;
- Witness tests and issue the corresponding report; and
- Produce a Factory Acceptance Test Report for each test. This will include the supplier's test as an exhibit.

Deliverables for Phase 2 – T2

Factory Acceptance Test Reports issued by the Suppliers with side-reports with comments from the Consultant

3.2.3 Phase 3 - Construction and Commissioning

3.2.3.1 Phase 3 – Task 1

During Phase 3, the Consultant will carry out the supervision of construction works. This will consist of supporting the Client in monitoring the implementation of the Project in terms of schedule, budget compliance, quality of work, performance of Project participants and compliance with the EPC contract and IsDB's ESHS Requirements.

The Consultant will continuously monitor the works and review the Contractor's periodic (monthly/quarterly) construction reports. The Consultant's monitoring will include a review of:

- Progress against the base case schedule; compliance with contractual milestones; implications for meeting the overall target completion dates and confirmation whether or not dates and deadlines are likely to be achieved; where possible, provide quantitative measurements (i.e. "percent complete") and use GANTT charts presentation format;
- Original budget versus revised outcome, estimate and variance for each budget item, highlight any actual or expected variance in the overall Project cost and confirm whether the Project is likely to become operational within the given budget;



- Adequacy of the work performance with approved design, construction supervision and control program;
- Status of procurement and spare parts inventory, and shipping and transportation;
- adequacy of the change orders (if any) and impact of change orders on the overall construction time and budget;
- Quality of work, monitor contractor's overall management of the construction, and issue of non-conformity notices for non-compliance with approved design, certification and testing arrangements;
- Construction arrangements and compliance with good construction practice, waste management, health and safety and labor rights compliance;
- Compliance with the ESAP, Environmental and Social Management Plans (ESMPs), Environmental and Social Safeguard (ESS) and other environmental and social documents;
- Progress in completing the electrical interconnection works; and
- Support the Client in the reporting for the Financiers.

The Consultant will review the Contractor's disbursement requests and confirm achievement or otherwise of the relevant milestones in accordance with the relevant Project Agreements as well as such other technical certifications as may be required under the financing documentation.

Consultant will carry out supervision and monitoring of works related to livelihood improvement component implementation covering training implementation and donation related activities. Training and donation will be given to selected participants (women and youth) from nearby villages. 750 women and youth from nearby villages will receive training under this component. Livelihood of 1,250 women and youth in the project communities will be improved after implementation of this component. Training will be given to participants on 10 selected courses namely – 1. Basic Computing, 2. Agriculture and Advanced Farming Practices, 3. Livestock Management, 4. Fisheries Management, 5. Electrician Training (House Wiring), 6. Mobile Servicing and Repair, 7. Welding, 8. Plumbing, 9. Driving and 10. Sewing Machine Course. Donation items will mainly comprise of four categories namely 1. Desktop Computer and computer lab related equipment, 2. Sewing Machine, Mobile Servicing Toolbox, Electrician Toolbox and library equipment, 3. Livestock and Agriculture Items (Cow, Sheep, Chicken, Seeds & Fertilizer and Fish Fry) and 4. Auto Rickshaw for disabled. The services of Consultant related to livelihood improvement component include but are not limited to:

- (i) verify women's inclusion targets in all trainings (e.g., $\geq 50\%$ participation or as applicable, as stated in the training document);
- (ii) monitor completion, certification, and post-training employment segregated by sex and age;
- (iii) monitor quality and relevance of training (e.g., alignment with market opportunities);
- (iv) oversee donation distribution fairness, ensuring women and vulnerable youth receive equal access;
- (v) mapping local labour market opportunities for women;
- (vi) engagement with small businesses, cooperatives, and industry sectors relevant to the 10 training areas;



- (vii) assessment of income-generation potential of donated assets;
- (viii) verify that training providers have gender-sensitive teaching practices; training schedules are suitable for women (timing, location, safety); and trainers are trained on safeguarding and inclusive pedagogy;
- (ix) assess and monitor barriers affecting women's participation (e.g., assess and monitor availability of childcare facilities during training, safety and transport barriers for women and adolescent girls, cultural constraints affecting attendance) and recommending appropriate mitigation measures; and
- (x) ensure regular focus group discussions with female trainees; proper mechanisms for women to provide feedback on training quality, donations, and employment support; and gender-responsive grievance redress monitoring (not just GBV reporting).

The Consultant will report monthly and quarterly to the Client on a routine basis and provide the corresponding progress reports. These will include ad hoc comments and review of unexpected events if they occur, such as proposed variations, material non-compliances or force majeure events.

The Consultant shall ensure that the Contractor's ESHS performance is in accordance with good international industry practice and delivers the Contractor's ESHS obligations. The ESHS related services include but are not limited to:

1. *review and recommend to approve the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions (not less than once every 6 months);*
2. *review and recommend to approve ESHS provisions of method statements, implementation plans, GBV/SEA prevention and response action plan, drawings, proposals, schedules and all relevant Contractor's documents;*
3. *review and consider the ESHS risks and impacts of any design change proposals and advise if there are implications for compliance with ESIA, ESMP, consent/permits and other relevant project requirements;*
4. *undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities related to the Works, to verify the Contractor's compliance with ESHS requirements including its GBV/SEA obligations;*
5. *undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other ESHS related documentation, as necessary, to confirm the Contractor's compliance with ESHS requirements;*
6. *agree remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor's ESHS obligations;*
7. *ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with ESHS obligations;*
8. *check that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;*
9. *review and critique, in a timely manner, the Contractor's ESHS documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation;*



10. *undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ESHS issues;*
11. *establish and maintain a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g of those reporting allegations of GBV/SEA.*
12. *ensure any GBV/SEA instances and complaints that come to the attention of the consultant are registered in the grievance redress mechanism*

The Consultant shall include following minimum items on ESHS reporting-

- (a) “The Consultant shall provide immediate notification to the Client should any incident in the following categories occur while carrying out the Services. Full details of such incidents shall be provided to the Client within the timeframe agreed with the Client.
 - (i) confirmed or likely violation of any law or international agreement;
 - (ii) any fatality or serious (lost time) injury;
 - (iii) significant adverse effects or damage to private property (e.g. vehicle accident); or
 - (iv) any allegation of gender based violence (GBV), sexual exploitation or abuse (SEA), sexual harassment or sexual misbehavior, rape, sexual assault, child abuse or defilement, or other violations involving children,
- (b) Ensure that contractor immediate notifications on ESHS aspects are shared with the Client immediately;
- (c) Immediately inform and share with the Client any immediate notification related to ESHS incidents provided to the Consultant by the Contractor, and as required of the Contractor as part of the Progress Reporting;
- (d) Share with the Client in a timely manner the Contractor’s ESHS metrics, as required of the Contractor as part of the Progress Reports.”

The Consultant shall develop a Gender-Responsive Reporting Templates that will be used throughout implementation, which shall-

- Include mandatory sex- and age-disaggregated data for all livelihood, training, and donation distribution activities.
- Capture progress against the Women & Youth KPI Framework.
- Document both quantitative metrics (training enrollment, attendance, completion, job placement, income increases) and qualitative insights (barriers faced by women, cultural constraints, community engagement).
- Feature dedicated sections on safeguarding, GBV/SEA reporting, grievance redress management, and measures taken to protect women and girls.
- Highlight success stories and case studies, improving visibility of impact and employment outcomes.
- Provide a structured mechanism for the Consultant to recommend corrective actions to improve inclusion and outcomes for women and youth.

The Client’s Project Manager and the Consultant shall hold site meetings regularly as required with the contractors' site representatives. These meetings will review the progress of the works and will be based on the monthly progress reports issued by the Consultant.



Minutes of the meeting shall be prepared and signed by the participating parties. Copies of the minutes shall be given to the participants and to the Client's management.

The Consultant's Project Manager will keep a daily site log with

- Weather conditions;
- Major works completed, accepted or rejected;
- Written notices given to the Contractor;
- Problems encountered; and
- Reference of meetings and other events, which have bearing on the project development.

Deliverables for Phase 3 – T1

Monthly Progress Report (see 5.3 in this Section for description)

Quarterly Progress Report (see 5.4 in this Section for description)

Progress Payment Certificates (see 5.5 in this Section for description)

3.2.3.2 Phase 3 – Task 2

During the commissioning phase, the Consultant will check that the commissioning and acceptance tests are performed adequately and that the Plant achieves the expected performance and is ready to be handed over to the Client.

- The Consultant will review and confirm, in the form of reports, the key acceptance, completion and commercial operation tests, including acceptance of civil works and electrical works, performance testing (including PR calculation during the PR test), energization, punch list items and final handover (confirmation of the beginning of the guarantee period as defined in the EPC contract). The Consultant will also review and advise on as-built documentation completeness, snagging and punch list items and confirm ESAP compliance up to that point.
- The Consultant will assist the Client in the preparation of the relevant completion certificates.
- Following the start of commercial operations the Consultant will provide a final report (the "Completion Report") confirming that the Project has been completed and commissioned, all the works specified in the Project Agreements have been completed in accordance with their provisions including the performance test and IsDB's EHSS Requirements, all relevant completion certificates have been issued and that the Consultant is not aware of any breach by the Contractor of its obligations under applicable law or the Project Agreements.

Deliverables for Phase 3 – T2

Project Completion Report (see 5.6 in this Section for description)

Preliminary Hand Over Certificate (see 5.7 in this Section for description)

3.2.4 Phase 4 – Plant Operation Assistance



3.2.4.1 Phase 4 – Task 1

The Consultant will support the Client in O&M performance evaluation monitoring the performance of the Project until the end of the Warranty Period (DLP). This will include the following activities:

- The Consultant will review and confirm the acceptability of the final O&M procedures, including detailed environmental and social monitoring and management plans for the operational phase. The Consultant will also monitor and confirm the completion of punch list items.
- The Consultant will review the periodic monthly/quarterly operation and maintenance reports prepared by the EPC contractor and make at least two site visits during the first year of operation (DLP). The Consultant's monitoring will include a review of:
 - energy output, availability and curtailment, compared to plant forecasts;
 - compliance with the forecast operating budget;
 - O&M arrangements and compliance with good international practice, health and safety compliance;
 - O&M statistics, quality control reports and any other relevant variable to determine compliance with the EPC contract;
 - compliance with the ESAP, ESMPs and other environmental and social documents;
 - performance and O&M of the high voltage interconnection;
 - status of spare parts;
 - compliance with permits; and
 - review and confirm the final acceptance tests.
- The Consultant will calculate the achieved PR during the reviewed period using the data provided by the Client.
- At the end of warranty period (DLP), the Consultant shall review all necessary reports and data associated with Final Acceptance of the Project, as defined in the Final Acceptance protocols. This will include, inter alia:
 - Review and comment on the test report by the contractors;
 - Evaluate compliance with performance guarantees, interconnection adequacy;
 - Comment on expected deviations to technical performance assumptions contained in the pro forma assumptions incorporated into the financial model;
 - Comment on technical deviations that may impact operations of the Project;
 - Review and assess procurement and spare inventory procedures;
 - Certify that the Final Acceptance, as applicable, have been achieved, including fulfilment of Performance Ratio guarantees and transfer of equipment warranties, among others.
- The Consultant will report quarterly to the Client on a routine basis during the DLP of 1 year and provide ad hoc comments and review if unexpected events occur, such as proposed variations, material non-compliances, warranty claims or force majeure events.
- The Consultant will assist the Client in dealing with settlement of all disputes that may arise between the Client and the Contractor.
- Every three months during the DLP, the Consultant will review O&M and performance of the power plant comparing the energy produced by the power plant with the energy that it should have produced as per the model supplied with the proposal run with the



measured hourly radiation data. If production is lower than expected review the proposals made by the Contractor to enhance production and report on them. The Consultant shall prepare quarterly Performance Report three months after commissioning and should develop the O&M reporting template and train to EGCB.

- The Consultant will assist the Client in identifying and rectifying defects during the defect liability period.
- Once the plant has successfully performed during the warranty period and passed the PR tests, the Consultant will prepare the Final Hand Over Certificate, Performance Certificate and Final Payment Certificate.
- The Consultant will carry on training and capacity building activities with the Client's personnel on operation and maintenance of PV plants.
- The Consultant will support the Client in the preparation of a long-term O&M management plan.

Deliverables for Phase 4 – T1

Quarterly Performance Report three months after commissioning, Operation & Maintenance Report (see 5.8 in this Section for description)

Warranty Inspection Final Report (see 5.9 in this Section for description)

Quality Control:

The home office of the Consultant shall maintain continuous support to the team in Bangladesh. Before submitting any report to the Client, the home office of the Consultant is obliged to carefully screen the respective document to ensure the required quality. The correspondent cost shall be included as a separate item in the financial proposal.

4. Team Composition & Qualification Requirements for the Key Experts (and any other requirements which will be used for evaluating the Key Experts under Data Sheet 21.1 of the ITC)

4.1 Qualification and Experience of Experts

The Team of the Consultant shall consist of the following experts who have qualifications and experience as stipulated below:

Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
Key Expert				
International Consultant Positions:				
1.	Position-K1: Team Leader (Solar Expert)	18 (70% shall be in field)	The expert shall have a bachelor or higher degree in engineering (Electrical/Electronic or Renewable Energy) or higher degree in relevant subject. The incumbent should have at least 20 years of professional experience of which at least 5 years in the development of	The team leader will undertake the following: (i) Coordinate with other team members to develop a detailed work plan and implementation schedule; (ii) Review and prepare the scope, implementation schedule, contracting,



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
			<p>solar power plants. The expert should have global experience.</p> <p>The expert, as team leader of consultant, completed at least 2 Solar PV power plants with an aggregated total capacity of 100 MW. The expert will get added advantage (i.e. more points) if the person implemented at least one project financed by an international donor agency including Islamic Development Bank (IsDB) or the World Bank or the Asian Development Bank or similar MDB or Japan International Cooperation Agency and has work experience in south Asia or Asia pacific region. The Team Leader shall be fluent in English.</p> <p>This position shall not be subcontracted to a third party or cannot be assigned to any professional currently holding an executive management position within the firm/company.</p>	<p>and implementation arrangements;</p> <p>(iii) Ensure reports are delivered on time to required quality and schedule;</p> <p>(iv) Lead the updating and enforcement of the operation and maintenance (O&M) manuals and system design books developed by the Contractor;</p> <p>(v) Supervise and monitor the project implementation, particularly during construction;</p> <p>(vi) Develop and maintain a project safety plan and project quality assurance plan and ensure compliance with plan.</p> <p>(vii) Review power plant performance quarterly during O&M period (DLP).</p> <p>(viii) Certify As-Built drawings and progress payments; and</p> <p>(ix) Prepare quarterly reports and analyze causes of delay, if any, and propose remedial measures as necessary.</p>
2.	Position-K2: Electrical Engineer	6 (80% shall be in field)	<p>The expert shall have a bachelor or higher degree in electrical engineering. The incumbent should have at least 15 years of professional experience of which at least 5 years on solar PV technology and electrical engineering. The expert should have experience in construction supervision of at least</p>	<p>The Expert will undertake the following:</p> <p>(i) Work closely with the project manager in ensuring efficient project implementation;</p> <p>(ii) Review the technical specification of the solar PV power plant prepared by the Contractor;</p> <p>(iii) Assist Project Manager on technical matters;</p>



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
			one solar PV power plant of at least 50 MW capacity interconnected with high voltage grid network through a substation (132 KV or higher voltage). Experience in the region is desirable. The expert should have global experience. This position shall not be subcontracted to a third party.	<ul style="list-style-type: none"> (iv) Review and confirm the contractor's submissions; (v) Supervise and monitor the project implementation related to solar and electrical system and support facilities; (vi) Monitor progress against plan; (vii) Certify As-Built drawings and progress payments; (viii) Ensure adherence to project safety plan and quality assurance plan; and (ix) Support on the updating and enforcement of the operation and maintenance (O&M) manuals and system design books developed by the Contractor.
3.	Position-K3: Commissioning Engineer/I&C Engineer	2 (100% shall be in field)	The expert shall have a bachelor or higher degree in electrical engineering. The incumbent should have at least 15 years of professional experience of which at least 8 years of relevant experience on commissioning of solar power plants. The expert should have commissioned at least 1 solar PV project of at least 50 MW capacity during the last 5 years. The expert should have global experience.	<p>The Engineer will undertake the following:</p> <ul style="list-style-type: none"> (i) Coordinate and finalize all commissioning schedules with the EPC contractor; (ii) Develop an inspection and testing plan covering factory and site tests; (iii) Review and recommend to approve all final commissioning procedure/methodology in line with relevant International standards; (iv) Supervise testing and commissioning as required; (v) Inspect and verify calibrations/certifications of the testing equipment as per relevant standards; (vi) Monitor and verify all guaranteed values as per contract terms; (vii) Ensure adherence to project safety plan and quality assurance plan; (viii) Prepare the impact reports and remedies in



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
				case of any test failures; and (ix) Prepare report for the Client to issue final acceptance certificate.
4.	Position-K4: Contract Specialist	2 (30% shall be in field, if required)	The expert shall have a bachelor's or higher degree in engineering or relevant fields. Masters or higher degree will get preference. The incumbent should have at least 15 years of general experience in procurement of which at least 5 years of relevant experience in contract management in power projects with FIDIC contract. The expert should have experience in contract management of at least 1 large infrastructure contract financed by Islamic Development Bank (IsDB), the World Bank or the Asian Development Bank or similar MDB. The expert should have global experience.	The expert will be responsible for the following tasks: (i) Assist the Client during the construction phase to monitor and report contract implementation including delays, interfaces management, claims, change orders, contractual notifications and amendments, etc.; (ii) Provide necessary inputs for the preparation of reports; and (iii) Any other related activity as may be reasonably requested by the Client. (iv) Time to time provide and update the Contract Management Plan
Sub-total International:		28		
National Consultant Positions:				
5.	Position-K5: Deputy Team Leader	13 (100% shall be in field)	The expert shall have a bachelor or higher degree in engineering or higher degree in relevant subject. Masters or higher degree will get preference. The incumbent should have at least 15 years of professional experience of which at least 5 years in the development of solar power plants. The expert, should have completed at least 1 Solar PV power plant of minimum 50 MW capacity. The expert	The deputy team leader will undertake the following: (i) Coordinate with other team members to develop a detailed work plan and implementation schedule; (ii) Review and prepare the scope, implementation schedule, contracting, and implementation arrangements; (iii) Ensure reports are delivered on time to required quality and schedule; (iv) Supervise and monitor the project



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
			<p>will get added advantage (i.e. more points) if the person implemented at least one project financed by Islamic Development Bank (IsDB), the World Bank, the Asian Development Bank or similar MDB or Japan International Cooperation Agency. Deputy Team Leader shall be fluent in English.</p> <p>This position shall not be subcontracted to a third party or cannot be assigned to any professional currently holding an executive management position within the firm/company.</p>	<p>implementation, particularly during construction;</p> <p>(v) Develop and maintain a project safety plan and project quality assurance plan and ensure compliance with plan.</p> <p>(vi) Certify As-Built drawings and progress payments;</p> <p>(vii) Prepare quarterly reports and analyze causes of delay, if any, and propose remedial measures as necessary.</p> <p>(viii) Coordinate with other team members and help the Project Manager review the Contractor's work plan and construction schedule;</p> <p>(ix) supervision and monitoring of works related to livelihood improvement component implementation; and</p> <p>(x) Ensure adequacy of operation and maintenance manuals.</p>
6.	Position-K6: Civil Engineer	8 (100% shall be in field)	<p>The expert shall have a bachelor or higher degree in Civil engineering. Masters or higher degree will get preference. The incumbent should have at least 15 years of professional experience of which at least 8 years in the design and implementation of dike, dam, coastal embankment protection system or similar hydraulic project. The incumbent has implemented at least one hydraulic project including hydraulic filling reclamation, flash flood protection and/or coastal tide protection system. The expert will</p>	<p>The Engineer will undertake the following:</p> <p>(i) Coordinate with other team members and help the Project Manager review the Contractor's work plan and construction schedule;</p> <p>(ii) Supervise and monitor the civil works and ancillary services (security, water supply, telecommunication, etc.) of the Project;</p> <p>(iii) Ensure adherence to project safety plan and quality assurance plan;</p> <p>(iv) Certify As-Built drawings and progress payments; and</p> <p>(v) Ensure adequacy of operation and maintenance manuals.</p>



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
			get added advantage if s/he has experience in construction of civil structures including foundations for solar PV power plants.	
7.	Position-K7: Transmission Line and Substation Expert (Electrical Engineer)	6 (100% shall be in field)	The expert shall have a bachelor or higher degree in electrical engineering. Masters or higher degree will get preference. The incumbent should have at least 15 years of professional experience of which at least 5 years in high voltage (132 kV or above) transmission line and substation design and/or construction.	The Expert will undertake the following: (i) Work closely with the project manager in ensuring efficient project implementation; (ii) Review the technical specification of 230 kV transmission system including substation at plant site prepared by the Contractor; (iii) Assist Project Manager on technical matters; (iv) Review and confirm the contractor's submissions; (v) Supervise and monitor the project implementation related to transmission system (line plus substation) and support facilities; (vi) Monitor progress against plan; (vii) Certify As-Built drawings and progress payments; (viii) Ensure adherence to project safety plan and quality assurance plan; and (ix) Support on the updating and enforcement of the operation and maintenance (O&M) manuals of plant substation developed by the Contractor.
8.	Position-K8: Environmental/Social Specialist	5 (100% shall be in field)	The specialist should have a bachelor or higher degree in environmental science or any branch of social sciences or a related field. Masters or higher degree will get preference. The	The specialist will assist in the following: (i) Monitor compliance with and implementation of safeguards and of the Environmental and Social Management Plan (ESMP) and Resettlement Action Plan



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
			incumbent should have at least 15 years of professional experience of which at least 5 years of relevant experience in electricity sector or other infrastructure project. The expert should have experience in implementing projects financed by any MDB /JICA.	<p>(RAP) provided by the Client to ensure environmental and social impacts of the Project are adequately managed;</p> <p>(ii) Ensure the environmental safeguard compliance during construction of the solar PV power plant, high voltage systems and support facilities;</p> <p>(iii) Recommend additional monitoring plans and/or additional measures required to address identified significant environmental/social impacts;</p> <p>(iv) Ensure that the Contractor's performance is in accordance with good international industry practice and delivers the Contractor's obligations;</p> <p>(v) Assist to ensure supervision and monitoring of livelihood improvement component implementation; and</p> <p>(vi) Ensure that the cost of implementing of mitigation measures for identified environmental/social management and monitoring plans, and any strengthening measures, are included in the proposed cost.</p>
9.	Position-K9: Health & Safety Specialist	5 (100% shall be in field)	The specialist should have a bachelor's degree in engineering or higher degree in any related field. Masters or higher degree will get preference. The incumbent should have at least 15 years of general experience of	<p>The specialist will assist in the following:</p> <p>(i) Monitor the preparation and execution of health and safety practices by all Contractors on site during construction; and</p> <p>(ii) Recommend additional monitoring plans and/or</p>



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
			which at least 5 years of relevant experience. The expert should have experience as Health and Safety Officer/ Specialist in at least one large infrastructure contract (power/ bridge/ gas/ dam/ factory).	additional measures required.
10.	Position-K10: Gender & Youth Inclusion Specialist	2 (100% shall be in field)	The specialist should have a bachelor or higher degree in any branch of social sciences or a related field. Masters or higher degree will get preference. The incumbent should have at least 15 years of professional experience of which at least 5 years in designing and monitoring women & youth's economic empowerment programs under any infrastructure/social project. The expert should have expertise in GBV/SEA prevention in economic programs, labour market inclusion for women & youth and private sector engagement. The expert should have experience in implementing projects financed by any MDB /JICA.	The specialist will assist in the following: (i) Ensure supervision and monitoring of livelihood improvement component implementation (along with timely reporting); (ii) Verify women's targets in all trainings (e . g . , $\geq 50\%$ or as applicable, as stated in the training document); (iii) Monitor completion, certification, and post-training employment segregated by sex and age; (iv) Monitor quality and relevance of training (e.g., alignment with market opportunities); (v) Oversee donation distribution fairness, ensuring women and vulnerable youth receive equal access; (vi) Mapping local labour market opportunities for women; (vii) Engagement with small businesses, cooperatives, and industry sectors relevant to the 10 training areas; (viii) Assessment of income-generation potential of donated assets; (ix) Verify that training providers have gender-sensitive teaching practices;



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
				(x) Verify that training schedules are suitable for women (timing, location, safety); (xi) Verify that trainers are trained on safeguarding and inclusive pedagogy; (xii) Assess and monitor barriers affecting women's p a (e.g., assess and monitor availability of childcare facilities during training, safety and transport barriers for women and adolescent girls, cultural constraints affecting attendance) and recommending appropriate mitigation measures; (xiii) Ensure regular focus group discussions with female trainees; (xiv) Ensure proper mechanisms for women to provide feedback on training quality, donations, and employment support; and (xv) Ensure gender-responsive grievance redress monitoring.
Sub-total National:		39		
Non-Key Expert				
1.	Local Project Coordinator	18	The expert shall have a bachelor or higher degree in any subject. The incumbent should have at least 10 years of professional experience of which at least 5 years in coordination of projects.	The local project coordinator will undertake the following: (i) Arrange meeting and coordinate with relevant stakeholders and team members; (ii) Prepare meeting minutes; (iii) Coordinate report preparation; (iv) Coordinate drawing design documents; (v) Acting as document manager of project; (vi) Provide administrative support and office



Sl. No.	Expert Position	Person-months	Education and Qualification	Expected Roles and Responsibilities
				management support to experts; and (vii) Perform any other task assigned by Team Leader/Deputy Team Leader.
Sub-total Local Project Coordinator:		18		
Total Person-Months: 85				

Qualified Bangladeshi nationals may work as “International Consultant” for above mentioned international positions if they meet required qualification and experience.

It is to be clarified that, for International Consultant position, “Home” means work in the office in the expert’s country of residence and “Field” work means work carried out in the Client’s country or any other country outside the expert’s country of residence.

4.2 Project schedule and work organization

4.2.1 Work Schedule

The duration of the construction is expected to last between ten and eighteen months because of the seasonal flooding, which usually takes place² from June to September. It could, however, be shorter depending on the Contractor’s design and work schedule.

The Consultant will review the Contractor’s work plan based on his professional knowledge and the concept and methodology used in the proposal to detect critical path activities that could impact completion time and keep special attention on them.

4.2.2 Logistics

The Project Director of EGCB is the focal point for this project. It will be the Consultant’s duty to maintain close contact to him or her on all aspects of work. As a matter of principle, all formal communications relating to the work will be directed to the attention of the Client’s Project Director.

The Consultant must provide the necessary staff (administrative/technical, foreign/local personnel), which is required for the execution of his services. To enhance the local technical skill and experience, close cooperation with the Client is necessary.

The Consultant is invited to give details on the envisaged logistical set-up for the execution of the services in his technical offer. All furniture, technical and office equipment as well as vehicles procured shall be handed over to the Client after completion/termination of the services.

²

<https://reliefweb.int/sites/reliefweb.int/files/resources/180520%20Start%20Fund%20Floods%20Disaster%20Summary%20Sheet.pdf>



4.2.3 Contribution of the Client

The Client will provide free of charge all existing information, data, reports and maps as far as available and will assist the Consultant in obtaining other relevant information and materials from Bangladeshi institutions and authorities as far as possible.

Nevertheless, it is the duty of the Consultant to check availability, quality and suitability of this information.

The information, data, reports etc. as mentioned above will be available for the Consultant's unlimited use during execution of the proposed services, however, it must be returned to the Client upon completion of the assignment.

The Client will provide office space to the Consultant in Dhaka or in project site.

4.2.4 Facilities to be provided by the Consultant

The Consultant shall arrange at its own cost for an adequately furnished office and the necessary office equipment, including communication facilities, transport means and any other expenditure for the entire project duration and all project components. During the project period, the Consultant shall be responsible for:

- § Provision of office space, related office equipment, office supplies, hardware and software equipment to make the office fully operational;
- § Provision of suitable number of vehicles on rental basis;
- § Provision of suitable number of mobile phones;
- § Any communication expenses (internet, phone, etc.);
- § Provision of secretarial and translation services;
- § Any cost incurred in document reproduction and printing.

The Consultant shall be entirely responsible for all living accommodation and insurances required for his staff in Bangladesh throughout the duration of the services including transport from and to the site and to the country of origin. Likewise, the consultant shall be responsible for all security measures associated to his personnel or services to comply with his assignments in Bangladesh.

The Consultant shall be responsible for his own working equipment and vehicles and the related costs, if not accounted separately in his financial offer, are deemed to be included under his fees.

5. Reporting Requirements and Time Schedule for Deliverables

The table below provides an indicative calendar for the Project's deliverables.

Sl. No.	Denoted as	Name of Report	Schedule of Delivery
Deliverables of Phase 1 - Preliminary works			



1	D1	Inception Report	At the end of 3 weeks from the date of Commencement of service.
Deliverables of Phase 2 - Pre-construction Activities			
2	D2	Project Vetting Reports	Monthly, after EPC Order to proceed is issued.
3	D3	Factory Acceptance Tests reports	On demand as per request of Client.
Deliverables of Phase 3 – Construction and Commissioning			
4	D4	Monthly Progress Reports	Monthly, during Construction & commissioning period.
5	D5	Quarterly Progress Reports	Quarterly, during Construction & commissioning period.
6	D6	Progress Payment Certificates	As per progress of the works.
7	D7	Project Completion Report	Within 1 week of Acceptance test completion.
Deliverables of Phase 4 – Plant Operation Assistance			
8	D8	O&M Review Report	Quarterly, after start of commercial operation of plant (up to Defect Liability Period of 1 year)

The following reports are to be produced during the course of the project and submitted to the Client for information and, as applicable, approval.

The Client considers of utmost importance the timely submission of project reports during the course of the project implementation. All reports shall be submitted in both hard copy (4 copies) and soft copy (pdf, word and excel format (or any other applicable software format)) to the Client with all required information for all the Scope of Services under this consultancy, as per requirement of the Client.

The format of the reports must be discussed and agreed upon with the Client. The Quarterly Progress Reports (QPRs) including implementation of the Environmental and Social Management Plan (ESMPs) shall cover all aspects of Project implementation, including livelihood improvement component implementation and the status of progress against agreed implementation and disbursement schedules for all lots of the project. The QPRs shall also highlight issues affecting Project implementation and proper corrective actions.

The Consultant shall also prepare or cause the EPC Contractor to prepare and submit to the Client the following documents and reports in the agreed format and volumes:

- Engineering documentation Report including Design Basis, Design Criteria, Calculations and Drawings and the Implementation Schedule



- Monthly Progress Reports to be prepared in a format to be agreed with the Client and availed in soft copy.
- Quarterly reports on Environmental Monitoring and Management during Construction and submitted in soft copies.
- Women and youths Livelihoods improvement training and delivery reports
- Operation and Maintenance Manuals
- Completion Reports and As-Built drawings
- Operation and Maintenance reports and Performance test reports (quarterly during the O&M period of 1 year (DLP))
- Cost saving allocation memorandum and binding documents
- KPI reports
- Contract Management Plan

The Consultant shall assist the Client to prepare various reports and documents requested by IsDB from time to time. Such request will not be unduly denied. The Consultant may assign duties to such staff but he retains responsibility for delivery of all services under his scope.

5.1 Inception report

The inception report will outline the Consultant's detailed work plan, define the review and implementation schedule by task, specify submission dates for each one of the required reports in draft form, and assign the personnel by name and date period to each task. The proposed Project schedule shall be broken down by tasks and sub-tasks and presented in Gantt chart form in an acceptable form using specific project scheduling software.

The inception report will take into consideration aspects such as:

- Current status of licenses and permits;
- Available project data, including soil conditions and geo-technical aspects; and
- Review of preliminary project schedule to identify critical path and main risks;

The Women & Youth KPI Framework should:

- Include participation, completion, employment, income, asset use, and empowerment indicators, disaggregated by sex and age.
- Define baseline, targets, data sources, frequency of measurement, and responsible parties.
- Capture quality dimensions, such as *training relevance, job quality, retention, satisfaction, and barrier reduction*.
- Include % of women completing skills training, % of women receiving tools/assets, % of women starting income-generating activities and number of female trainees placed in jobs in non-traditional sectors (computing, electrical, mobile servicing, etc.) following training document.
- Integrate gender-specific indicators (e.g., childcare access, safe transport, women's mobility, GBV/SEA-safe environments).
- Incorporate youth-specific indicators (e.g., access to apprenticeships, entrepreneurship outcomes, digital inclusion).



- Integrate % of women and youth who find employment, self-employment, or improved livelihoods within 3–6 months after skills training; % of women who receive tools/livelihood assets and successfully use them; number and type of private companies partnered for job placement / apprenticeships and retention and job quality measures (contract type, income changes, etc.).
- Align with IsDB's results-based monitoring requirements and project-level livelihood commitments.

5.2 Project Vetting Report

During the preconstruction phase, the Consultant will elaborate a Project Vetting Report detailing the results of the reviews that have been carried out so far, and a log of the time spent between submittals and replies. Report should hold links to the relevant documentation.

5.3 Monthly Progress Report

The Consultant shall prepare and submit monthly progress report to the Client.

The monthly progress reports shall be prepared in accordance with IsDB guidelines. The reports by contracts shall at least include:

-> Construction Phase

Until the final acceptance of the Project the Consultant will include the following aspects of the execution of the Project in each of the Progress Reports:

- Evaluation of the overall Project progress status versus the time preliminary time schedule and versus the schedule agreed in the EPC contract.
- Specific progress status of major parts of the Project versus agreed schedules.
- Evaluation of the works (Engineering, Manufacturing, Delivery at Site, Installation, Commissioning, Reception) actually performed by the EPC contractor versus the approved EPC contract.
- Project's financial status versus budget including payments made and committed costs.
- Quality control protocols and contractual disbursement milestones accordingly
- Pointing out challenges/shortcomings and areas under review and indicating solutions.

The Progress Reports in the Construction Phase shall at least include the aspects indicated by the following preliminary Table of Contents. Progress report shall include status of livelihood improvement component implementation. The contents should be adjusted and supplemented by the Client according to its expertise and that of the implementation consultant.

Preliminary Table of Contents for the Progress Reports until final acceptance:

1. Executive summary
2. Deviations and Corrective Actions
3. HSE (Health, Safety and Environment) including Reports on all HSE incidents (e.g. Accidents and Training activities)



4. Project status (subchapters to be added as they become relevant)
 - a. Procurement
 - b. Engineering
 - c. Manufacturing
 - d. Delivery at Site
 - e. Construction and Installation
 - f. Commissioning
 - g. Preliminary and Final Acceptance test
 - h. End of Warranty Inspection
 - i. Change Orders and Contractual changes (if any)
 - j. Quality Management
 - k. Delay and deviations (if any)
5. Cost
 - a. Overview
 - b. Current financial status
 - c. Cost forecast and comparison with project budget
6. Insurances and Guarantees
7. Time schedule and milestone trend analysis
8. Photo Report

5.4 Quarterly Progress Report

The Consultant will assist the Client in the preparation of the quarterly progress reports to be sent to the IsDB. Such reports will be produced as per IsDB guidelines.

5.5 Progress Payment Certificates of Contractor

The Contractor shall submit to the Client a statement showing costs for executed works, goods delivered and services rendered up to the end of the month. The form of the statement shall be in accordance with standard format agreed by the Client and the Consultant. The Consultant shall review the progress payment claims and return it to the Project Director of the Client with recommendation of full or partial payments including all relevant measurement sheets, quality schedules, and other documentation which are necessary to substantiate the claim by the Contractor or recommendation by the Consultants partial payments.

The Consultant shall compare the statement with their own records and solve issues of differences with the Contractor. The updated master copies of progress charts shall be submitted to the Client along with the monthly statement, the progress charts, the duplicate sheet, the works diary, the monthly site financial statement, etc.

The Client shall check the monthly statement endorsed by the Consultant and authorize the payment.

5.6 Project Completion Report (PCR)

Upon completion of the project (successful acceptance tests and no major pending items in the Snagging list), the Consultant shall prepare a Project Completion Report (PCR) in



accordance with the Client and IsDB requirement. The PCR will form a comprehensive record of the design, construction and erection works accomplished including:

- i) A description of changes or modifications versus the original Design;
- ii) Issues and adopted solutions;
- iii) Overall construction volume, quantities and costs; and
- iv) Lessons learned.

5.7 Completion and Operational Acceptance Certificate

The Consultant shall carry out needed inspections in liaison with the Client and prepare the draft Operational Acceptance Certificate and Completion Certificate in accordance with the EPC Contract.

5.8 Operation and Maintenance Reports and Performance Test Reports

After completion of works, testing and commissioning of installations, the Consultant shall prepare an edition of the Operation and Maintenance Report and Performance Test report quarterly up to DLP of 1 year. The main goal is to measure the performance of the power plant and compare the plant's output versus the guaranteed values.

The Consultant shall at least report on the following aspects.

- Punch List situation and update
- Annual Energy Production Certificate
- Annual Energy that should be produced according to the production model supplied by the contractor and the hourly meteorological data acquired during the year in the meteorological station
- Availability factor
- General condition of the solar modules and inverters
- Capacity factor
- Operation and List of Deviations and Maintenance Events
 - Solar irradiation and Temperature Distribution (Daily and Monthly Average Values)
 - List of Operation Events and main reasons for Loss of Production
 - Operating Hours for each month
 - Spare Parts Use List & Statistics for each month
 - Meteorological station data consistency report and modification, if needed, to be used in the production model provided by the contractor.
- Environment, Health and Safety
 - Health and safety relevant events (training, accidents, etc.),
 - Waste and water management practices and treatment, as well as other relevant environmental events
- Financial Report
 - Average electricity supply and sales, as well as planned annual balance
 - Net solar energy dispatched by the Solar PV Facility per month, week, day and hour
 - Net annual energy balance (per month, week, day and hour)
 - Total annual income generated by the energy sales



- O&M cost total and breakdown

These topics shall be adjusted and supplemented by the Consultant according to their expertise.

The report will identify, review and comment on the actions taken by the Contractor to address defects during the defect liability period.

5.9 Warranty Inspection Final Report

At the end of the one year of Operation and Maintenance (up to DLP) a final report will be issued compiling the results and commitments fulfilment. If the optional services regarding the Third Party End of Guarantee Inspection will be awarded by the Client, upon IsDB No objection, its report should be included in the Annex of the Warranty Inspection Final Report. It will prepare the Completion Certificates, Performance Certificate and Final Payment Certificate.

6. Client's Input and Counterpart Personnel

(a) Services, facilities and property to be made available to the Consultant by the Client:

The Client will provide free of charge all existing information, data, reports and maps as far as available and will assist the Consultant in obtaining other relevant information and materials from Bangladeshi institutions and authorities as far as possible.

Nevertheless, it is the duty of the Consultant to check availability, quality and suitability of this information.

The information, data, reports etc. as mentioned above will be available for the Consultant's unlimited use during execution of the proposed services, however, it must be returned to the Client upon completion of the assignment.

The Client will provide office space to the Consultant in Dhaka or in project site.

(b) Professional and support counterpart personnel to be assigned by the Client to the Consultant's team:

No professional or support counterpart personnel will be assigned by the Client to the Consultant's team.

The Project Director of EGCB is the focal point for this project. It will be the Consultant's duty to maintain close contact to him or her on all aspects of work.

7. Environmental and Social Policy

The Works' policy goal, as a minimum, should be stated to integrate environmental protection, occupational and community health and safety, gender, equality, child protection, vulnerable people (including those with disabilities), sexual harassment,



gender-based violence (GBV), sexual exploitation and abuse (SEA), HIV/AIDS awareness and prevention and wide stakeholder engagement in the planning processes, programs, and activities of the parties involved in the execution of the Works.

As a minimum, the policy is set out to the commitments to:

- 1. apply good international industry practice to protect and conserve the natural environment and to minimize unavoidable impacts;*
- 2. provide and maintain a healthy and safe work environment and safe systems of work;*
- 3. protect the health and safety of local communities and users, with particular concern for those who are disabled, elderly, or otherwise vulnerable;*
- 4. ensure that terms of employment and working conditions of all workers engaged in the Works meet the requirements of the ILO labour conventions to which the host country is a signatory;*
- 5. be intolerant of, and enforce disciplinary measures for illegal activities. To be intolerant of, and enforce disciplinary measures for GBV, inhumane treatment, sexual activity with children, and sexual harassment;*
- 6. incorporate a gender perspective and provide an enabling environment where women and men have equal opportunity to participate in, and benefit from, planning and development of the Works;*
- 7. work co-operatively, including with end users of the Works, relevant authorities, contractors and local communities;*
- 8. engage with and listen to affected persons and organizations and be responsive to their concerns, with special regard for vulnerable, disabled, and elderly people;*
- 9. provide an environment that fosters the exchange of information, views, and ideas that is free of any fear of retaliation, and protects whistleblowers;*
- 10. minimize the risk of HIV transmission and to mitigate the effects of HIV/AIDS associated with the execution of the Works;*

Code of Conduct

A minimum requirement for the Code of Conduct should be set out by the Client, taking into consideration the issues, impacts, and mitigation measures identified, for example, in:

- project reports e.g. ESIA/ESMP*
- any particular GBV/SEA requirements*
- consent/permit conditions (regulatory authority conditions attached to any permits or approvals for the project)*



- *required standards including IsDB EHS Guidelines*
- *relevant international conventions, standards or treaties, etc., national, legal and/or regulatory requirements and standards*
- *relevant sector standards e.g. workers' accommodation*
- *grievance redress mechanisms.*

A satisfactory code of conduct will contain obligations on all Consultant's Experts that are suitable to address the following issues, as a minimum. Additional obligations may be added to respond to particular concerns of the region, the location and the project sector or to specific project requirements. The code of conduct shall contain a statement that the term "child" / "children" means any person(s) under the age of 18 years.

The issues to be addressed include:

1. Compliance with applicable laws, rules, and regulations
2. Compliance with applicable health and safety requirements to protect the local community (including vulnerable and disadvantaged groups), the Consultant's Experts, the Client's personnel, and the Contractor's personnel, including sub-contractors and day workers (including wearing prescribed personal protective equipment, preventing avoidable accidents and a duty to report conditions or practices that pose a safety hazard or threaten the environment)
3. The use of illegal substances
4. Non-Discrimination in dealing with the local community (including vulnerable and disadvantaged groups), the Consultant's Experts, the Client's personnel, and the Contractor's personnel, including sub-contractors and day workers (for example, on the basis of family status, ethnicity, race, gender, religion, language, marital status, age, disability (physical and mental), sexual orientation, gender identity, political conviction or social, civic, or health status)
5. Interactions with the local community(ies), members of the local community (ies), and any affected person(s) (for example to convey an attitude of respect, including to their culture and traditions)
6. Sexual harassment (for example to prohibit use of language or behavior, in particular towards women and/or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate)
7. Violence, including sexual and/or gender based violence (for example acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion, and deprivation of liberty)
8. Exploitation including sexual exploitation and abuse (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading behavior, exploitative behavior or abuse of power)



9. Protection of children (including prohibitions against sexual activity or abuse, or otherwise unacceptable behavior towards children, limiting interactions with children, and ensuring their safety in project areas)
10. Sanitation requirements (for example, to ensure workers use specified sanitary facilities provided by their employer and not open areas)
11. Avoidance of conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favors, are not provided to any person with whom there is a financial, family, or personal connection)
12. Respecting reasonable work instructions (including regarding environmental and social norms)
13. Protection and proper use of property (for example, to prohibit theft, carelessness or waste)
14. Duty to report violations of this Code
15. Non-retaliation against personnel who report violations of the Code, if that report is made in good faith

The Code of Conduct should be written in plain language and signed by each Expert to indicate that they have:

- 1. received a copy of the code;*
- 2. had the code explained to them;*
- 3. acknowledged that adherence to this Code of Conduct is a condition of employment; and*
- 4. understood that violations of the Code can result in serious consequences, up to and including dismissal, or referral to legal authorities.*

A copy of the code shall be displayed in the Engineer's office. It shall be provided in appropriate languages.

Duration of the Assignment and required person months: The duration of service will be 30 (thirty) months. The proposed assignment will be for 85 (eighty-five) person-months which includes international and local professional inputs, as well as non-key expert inputs. The assignment time is divided into four phases. The first phase is the Preliminary works, second phase is Pre-construction activities, third phase is Construction and Commissioning and fourth phase is Plant operation assistance.

