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## **REQUEST FOR EXPRESSION OF INTEREST (REOI)**

19 NOV 2024

Kigali, on ...../...../2024

Ref: RW-REG/EDCL-451753-CS-QCBS

**Client:** Energy Development Corporation Limited (EDCL)

**Project:** Rwanda Accelerating Sustainable and Clean Energy Transformation in AFE MPA (ASCENT-Rwanda)

**Tender Name:** Hiring consultant firm for supervision of Access projects (Batch1 under ASCENT Project),

### **BACKGROUND AND CONTEXT**

The Government of Rwanda wishes to achieve 100% of electrification. From the existing MV national grid, medium voltage network will be extended through installation of 693 distribution transformers, construction of 762.3km of MV (15& 30kV) distribution lines and 2,633.4km of LV (0.4kV) network and connection to 104,070 households. This project addresses access to electricity in the Southern and eastern provinces of Rwanda.

#### **1. OBJECTIVE OF THE ASSIGNMENT**

The project's objective is to support "improvement of access to reliable and cost-effective electricity services for households and priority public institutions and sustain the reliability of electricity supply in Rwanda and strengthen the institutional capacity of key sector players in the project."

#### **2. DURATION OF THE ASSIGNMENT**

The duration of the assignment is 48 months plus 18 months of Defect Liability Period.

#### **3. SCOPE OF THE ASSIGNMENT**

The purpose of the consultancy service is to carry out the role of supervision for energy access construction works.

The Consultant tasks shall include but not limited to the following:

- a) Review, update, and finalize the detail design and specifications prepared by the contractors and the conceptual designs by EDCL to ensure that they conform to acceptable international standards,
- b) Preparation and submission of the detailed project implementation schedule to EDCL's project team for onward submission to the Bank,
- c) Ensuring that the environmental and social impact mitigation and monitoring measures



are included in the Project's Environmental and Social Management Plan (ESMP) and the Environmental and Social Impact Assessment (ESIA) and are appropriately executed by the contractors as well as by relevant community and district and local government authorities.

- d) Preparation and submission of Project Completion Report, outlining, inter-alia, achievements in relation to objectives and targets in accordance with the World Bank's (WB's) requirements, etc.

#### 4. DESCRIPTION OF PROJECT:

The following project will be supervised by the selected consultant firm:

	<b>NAME OF PROJECT(Batch1)</b>	<b>HHS</b>	<b>No. TRF</b>	<b>MV km</b>	<b>LV km</b>
1	Design, Supply, and Installation of low voltage and medium voltage lines and service connections in Gisagara district	12000	80	88	304
2	Design, Supply, and Installation of low voltage and medium voltage lines and service connections in Huye, Nyamagabe and Nyaruguru districts	21500	143	157.6	544.6
3	Design, Supply, and Installation of low voltage and medium voltage lines and service connections in Muhanga district	10000	67	73.7	254.6
4	Design, Supply, and Installation of low voltage and medium voltage lines and service connections in Ruhango district	4770	32	35.2	121.6
5	Design, Supply, and Installation of low voltage and medium voltage lines and service connections in Bugesera district	14000	93	102.6	354.6
6	Design, Supply, and Installation of low voltage and medium voltage lines and service connections in Kayonza & Gatsibo districts	21800	145	159.86	552.2
7	Design, Supply, and Installation of low voltage and medium voltage lines and service connections in Nyanza district	20000	133	146.3	505.4
	<b>Total scope</b>	<b>104070</b>	<b>689</b>	<b>757.9</b>	<b>2618.2</b>

#### 5. SELECTION PROCESS

Consultant Firm may associate with other firms to enhance their qualifications and submit the joint ventures agreement signed and notarized. All partners in the joint venture shall be jointly

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and severally liable for the entire contract, if selected.

A Consultant will be selected in accordance with the Quality Cost Based Selection (QCBS) method set out in the World Bank Procurement Regulations.

Consultant firms between (5 to 8) shall be shortlisted and be invited to submit their technical and financial proposals.

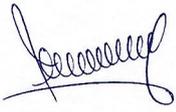
The consultant firms will be shortlisted using the following criteria:

- General experiences of the firm: Ten (10) years of experience related to the energy projects assignment, with expertise on development of different stages of the project including not limited to design, review and supervising electrification works, contract management, preparation of reports, having planning tools (software licenses), ISO certification, available key experts.
- The consultant firms must have similar experience; at least two (2) contracts with good completion certificates, in terms of nature and complexity (supervision of medium, low voltage distribution line, and services connection works or Access projects. the similar projects executed in the last eight (8) years (since 2016). The value of the project to be considered should be a value at least equivalent to 2,500,000 USD.
- The interested consultant firms should have an average annual turnover of at last three year equivalent to Two (2) million US dollars (2021-2023). (audited financial statements should be submitted).

The expression of interests will be submitted the Managing Director of the Energy Development Corporation Limited (EDCL) through the e-mail's addresses below:

[procurement@edcl.reg.rw](mailto:procurement@edcl.reg.rw) copy to [tuwiringiyimana@edcl.reg.rw](mailto:tuwiringiyimana@edcl.reg.rw) and [cuwajeneza@edcl.reg.rw](mailto:cuwajeneza@edcl.reg.rw) not later than 20/12/2024 at 5:00pm Kigali time (GMT +2).

Sincerely,

  
gentile  
umushashi  
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**Gentile UMUSHASHI**  
Head Procurement Management Services



**Félix GAKUBA**  
Managing Director



**TERMS OF REFERENCE FOR HIRING A FIRM FOR SUPERVISION SERVICES FOR ACCESS PROJECTS**

**Title of the Tender: Hiring consultant firm for supervision of Access projects (Batch1 under ASCENT Project)**

**Ref No: RW-REG/EDCL-451753-CS-QCBS**

**Project: Rwanda Accelerating Sustainable and Clean Energy Transformation in AFE MPA (ASCENT-Rwanda)-RW-REG/EDCL-451753-CS-QCBS**

**Client: Energy Development Corporation Limited (EDCL)**

**Date of Issue: November, 2024**

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## I. BACKGROUND INFORMATION

### 1.1. GENERAL INFORMATION

The ASCENT program is a set of energy projects funded by World Bank and Asian Infrastructure Investment Bank which will be implemented in Rwanda to accelerate access to sustainable, reliable, and clean energy for households, enterprises, and public institutions in the Republic of Rwanda. It will be implemented by the Energy Development Corporation Limited (EDCL) subsidiary of Rwanda Energy Group in Accelerating Sustainable and Clean Energy Transformation (ASCENT) program based in Rwanda.

### 1. PROJECT FINANCING.

Asian Infrastructure Investment Bank and the World Bank will finance the total cost of the Access project as defined in table 1

Phase of implementation	Scope (connection of new households)
Batch1	<b>104,070</b>
Batch2	237,139
Fill in	79,765
Total number of connections	<b>420,974</b>

### 1.2. CONTRACTING AUTHORITY

The Rwanda Energy Development Corporation Limited (EDCL) is the contracting Authority on behalf of the Government of the Republic of Rwanda through the Ministry of Infrastructure (MININFRA).

### 1.3. INSTITUTIONAL BACKGROUND

The Ministry of Infrastructure of Rwanda (MININFRA) prioritized energy sector activities to:

- ❖ Committed generation projects to bring the total installed capacity to 556MW in 2024.
- ❖ Increase household electricity access up to 100% for both on grid and off grid.
- ❖ Strengthen the national grid network to focus on network upgrade initiatives, transmission system expansion, and protection across the country.
- ❖ Reinforce national and urban street lighting.
- ❖ Promote biomass alternatives to encourage urban dwellers towards cleaner and more efficient cooking methods and
- ❖ Develop the strategic fuel reserve.

Rwanda Energy Group (REG) is a national institution under the Ministry of Infrastructure (MININFRA). It was created in July 2014, as a public company responsible for the import, export, generation, transmission, distribution, and sale of electricity in Rwanda. It is under the supervision of the Ministry of Infrastructure (MININFRA). REG acts as Coordinator and Supervisor of two Subsidiaries (EDCL and EUCL), which are free to carry out their daily activities in accordance with their Business Plans and mandates. REG works closely with the Rwandan Ministry of Infrastructure to define and monitor national goals and objectives by the two Affiliate institutions:

Energy Development Corporation Limited (EDCL) is responsible for the identification of power generation sites, the acquisition of land, contractors, and necessary infrastructure for the development of the Power Plants and power line projects (low voltage and high voltage). EDCL's mandate is to oversee the implementation of power generation projects, construction of transmission networks from the points of production to Distribution, implementation of Government programs to reduce the use of traditional fuels (Charcoal and wood) to ensure safe and environmentally friendly cooking fuels (Gas, briquettes, and electricity). Energy Utility Corporation Limited (EUCL) is responsible for the operation and maintenance of Power Plants, distribution networks, as well as the supply of electrical energy to consumers at a sustainable price for the distribution of electricity. EUCL is also responsible for negotiating the price of electricity produced and ensuring the operation of the line built. EDCL prepared these terms of reference to recruit a qualified firm for the supervision and monitoring of the construction works associated with access projects under ASCENT PROGRAM.

#### **1.4. SITUATION OF ELECTRICITY GENERATION AND TRANSMISSION**

The installed capacity is 406MW by Annual Report of the end of June 2023/2024 FY. This was the result of the commissioning of Hakan Peat to Power Plant (35MW); Ntaruka A (2.0 MW), Mwange-Kavumu (0.33 MW) and additional 40 MW imported from Uganda. Generation mixes by end of June 2023: Hydro technology contributes (109.66MW) 27.0%; thermal technology contributes (28MW) 7.1%; Peat contributes (85MW)20.9%; Methane contributes(85.79MW) 21.1%; solar contributes(12.05MW) 3% and a portion of (85.1MW)11.9% of the total installed capacity comes from import. In 2023, the total production of electrical energy was 1,199.58GWh. the available electricity was supplied by IPPs (Independent Power Producers) 64.01%, by Government of Rwanda (GoR) Power Plants 26.55% and energy imports 9.94%. In addition to the installed capacity, Rwanda has commissioned Ntaruka A, thermal power stations 35MW (Hakan) Rusumo-Falls (26.7MW), and we intend to receive Nyabarongo II (43.5MW), 35MW unit2 peat to power, Ruzizi III 64MW, and several micro hydroelectric plants under development. Electricity is transmitted via High Voltage (HV) 220kV,110kV and Medium Voltage (MV) 15 and 30kV electrical transmission and distribution networks. By June 2023 The length of Kms of high voltage lines (220 and/ or 110kV) is currently 1,158 Km after commissioning of Km 184.86 from Rusumo-Bugesera-Shango (117.60Km); Rwanda-Burundi (62.84Km) and evacuation line of SPLK to the existing Rwanda-DRC transmission line (4.42Km). (Annually report of 2023).

## **II. OBJECTIVE, PURPOSE & EXPECTED RESULTS**

### **2.1. OVERALL OBJECTIVE**

The overall objective of the project is to accelerate access to sustainable, reliable, and clean energy for households, enterprises, and public institutions in the Republic of Rwanda.

### **2.2. RESULTS TO BE ACHIEVED BY THE CONSULTANT.**

The consulting firm will act on behalf of the client in fulfilling the scope of its contract and designated duties as identified and assigned in construction contracts with the EPC contractor. The consultant will have to undertake the review of the conceptual Design by EDCL as well as the detail design by the EPC contractors. Construction of the facilities of the project (i.e. lines and service connections) are implemented through EPC (turnkey) Contract in an orderly manner with a high standard of

workmanship and specified quality of materials within the scheduled construction period, and in conformity with the approved drawings, specifications and contract management, acceptable environmental standards and in accordance with the Client's requirements.

### **III. SCOPE OF THE ASSIGNMENT**

#### **3.1. DESCRIPTION OF PROJECT**

	<b><i>NAME OF PROJECT(Batch1)</i></b>	<b><i>HHS</i></b>	<b><i>No. TRF</i></b>	<b><i>MV km</i></b>	<b><i>LV km</i></b>
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#### **3.2. TASK AND ACTIVITIES OF THE SERVICES**

##### **3.2.1. General overview of the scope of services**

The Consultant shall be responsible of the following tasks:

- Follow up regularly on the Contractor's implementation of all activities under the EPC Contracts.
- Provide oversight during the construction phase, ensuring that electrical, civil, and environmental works are performed according to the approved plans and specifications.
- Witness the testing and commissioning procedures to verify functionality and performance, advising the client on incorporating sustainable design principles and energy-efficient technologies into their projects.

- Supervise the construction works and manage contracts for all activities, including but not limited to civil and electrical works for the lines and all related facilities and structures.
- Approve all necessary working drawings, ensuring quality construction and strict compliance with the resettlement plan tailored to the site-specific Environmental Management Plan (EMP) and specifications. Measure and certify completed works to facilitate the contractor's progress payments.
- Verify and approve expropriation files submitted by the contractor for the People Affected by Projects.
- Review and approve the Health, Safety, and Environment (HSE) Plan, prepare a Change Management Statement if necessary, and supervise its implementation.
- Assess and approve manufacturers/vendors for all materials and equipment for the lines.
- Attend and approve Factory Acceptance Test (FAT) plans for major equipment, as specified in the EPC contract, and attend together with nominated client representatives.
- Attend project-level meetings and any other meetings proposed by the employer (client).
- Approve the testing and commissioning protocols, the tests, and the commissioning plan, and lead the testing and commissioning activities.
- Assist the client in taking over the contractor's works.
- Prepare a list of snag items in the completed works before the end of the defect's liability period.
- Prepare taking-over certificates and documents as required for the acceptance of works/goods by the client.
- Prepare responses to audit observations concerning certified payments and assist the client in resolving all issues.
- Using the output from the quality control program and the quantity surveying and measurement program, prepare monthly and quarterly progress reports.
- Prepare a comprehensive Project Completion Report upon completion of the contract, including approval of as-built drawings based on the "as-constructed" drawings prepared by the contractor.
- Approve all contractor invoices based on project progress and the quality and quantity control program.
- Approve the O&M Manual in joint revision with EDCL's representatives.

### **3.3. DETAIL SCOPE FOR SUPERVISION**

#### **3.3.1. Approve the EPC contractor's detail designs.**

- Review the calculation notes, hypotheses, drawings, diagrams, and documents submitted for approval, ensuring they meet contract specifications and accepted codes of practice.
- Ensure that the civil works construction designs, and the works in general, are prepared in consideration of the mitigation measures outlined in the Environmental and Social Management Plan (ESMP) and the Resettlement Action Plan (RAP).
- Ensure that the EPC contractor has accounted for the design measurements of existing facilities and the integration of the new facilities, including new lines, into the national grid system.
- Review and approve detailed engineering drawings and specifications for all equipment

### **3.3.2. Supervise the procurement of goods.**

- Ensure contractor's compliance with time schedule for manufacturing, testing, and shipping equipment to site.
- Assess that equipment and materials conform with contract specifications and standards.
- Examine any modification in relation to the contract specifications that the contractor may need to make, reporting those implying additional costs to the contracting authority for approval.
- Examine and approve the program for FAT proposed by the contractor, participate in works acceptance procedures, and draw up the reports for each works inspection.
- Check that all equipment and materials have been subjected to type tests already and certified and all relevant additional test described in the tender documents must be performed accordingly.
- Witness the factory tests at contractor/supplier's factories in collaboration with the contracting authority and prepare inspection reports.
- Check and inspect materials and equipment delivered to site.

### **3.3.3. Supervise the Works**

- Review and approve EPC Contractor's works schedule for each contract.
- Define the management methods and budget monitoring as well as the schedules for any anticipated corrective measures.
- Ensure coordination and supervision of Contractors materials supplied and work completed shall be based agreed standard up from supplier to contractor store and to the site for installation.in compliance with the relevant Standards (including environmental and social standards) and codes of practice.
- Settle as far as possible any conflict arising between contractors and the contracting authority.
- Supervise all construction and installation activities of the distribution lines and service connections, including contractor's construction procedures and schedules.
- Supervise the performance of all tests required to ensure the good quality of all materials used in construction, in particular soils, rocks, aggregates, cement, poles, conductors, etc. and analyse test results to ensure good quality construction.
- Supervise the excavations (areas to be backfilled, foundations for poles and base blocks) including environmental aspects (erosion, river crossings)
- Check the reinforcement drawings and assembly drawings.

### **3.3.4. Supervise EPC contractor's commissioning activities.**

- Carry out the final inspections to the project components (MV lines extended, transformers installed and LV lines with customers connected).
- Carry out acceptance procedures for all the structures and equipment (MV lines extended, transformers installed and LV lines with customers connected) and issue the corresponding completion certificates in accordance with the relevant conditions of contract with prior consent of the contracting authority.
- Review the EPC contractor's as-built drawings, operation, and maintenance manuals.
- Witness the commissioning test and final functions operation with the participation of the contracting authority 'representatives.

### **3.3.5. Environmental, social, gender and health & safety mitigation measures and reporting.**

- The consultant must ensure that all the environmental and social impact mitigation and monitoring measures in the Project's Environmental and Social Management Plan (ESMP) and Environmental and Social Impact Assessment (ESIA) are appropriately executed by the contractors.
- The consultant shall perform environmental, social, gender and health & safety monitoring during all stages of the Project.

The consultant shall perform the following activities during the construction phase of the Project:

- Check whether all environmental and social issues are considered, including compliance with local laws, and compliance with the World Bank environmental and social safeguard requirements.
- The required permits are available on time to the contractors and EDCL is fully involved in the monitoring process.
- The ESMP implementation reports are duly delivered to the National Environmental Agency on an agreed periodicity and the comments provided are taken into consideration by the contractor.
- Environmental Agency is facilitated in its work of conducting environmental monitoring audits of the project.
- Checking availability of adequately equipped first aids kits and training and appointment of first aiders by each contractor.
- Checking health and safety awareness of the workers regarding the relevant hazards of their work.
- Ensuring full participation of affected people in the planning and implementation processes.
- Ensure that during the commissioning and operation phase the contractor has undertaken the final cleanup operation.
- Ensure that all construction contractors include a general environmental, social, health and safety management plan (ESHS-MP) in their bid proposal, based on the ESMP for the Project.
- Ensure that all construction contractors prepare an acceptable, detailed ESHS-MP and an HIV/AIDS Awareness and Prevention Plan prior to commencement of site preparation and construction activities.
- Ensure that all construction contractors implement the detailed HSES-MP and HIV/AIDS Awareness and Prevention Plan and otherwise adhere to sound construction management guidelines.
- Prepare a baseline for monitoring the socio-economic changes that will occur to communities due to the project regarding economic status, employment, and income levels by gender (where feasible), knowledge, attitudes, and practices about communicable diseases such as HIV/AIDS, etc.
- Get an update on the project affected people's (PAPs) socio-economic status regarding their livelihood even those who have moved out of the area to assess if the project has made them worse or better.
- Conduct a labor audit in terms of bonded labor or employment of children under-age.
- Keep records of and report on industrial accidents and incidents including tracking the LTIFR

(Lost Time Injury Frequency Rates) and incidence trends; The consultant shall carry out the necessary environmental monitoring activities together with EDCL.

- In addition, the consultant shall include in his monthly and quarterly progress reports, activities performed concerning environmental mitigation measures, ensure that EDCL has conducted a clear public notifications and involvement of local authorities; including ensuring that the grievance reporting and redress mechanisms are known to the affected persons and communities, consultant (where required) to update the existing RAP and organize payments to project affected peoples (PAPs) and on implementation of the RAP. The RAP will be based on the line widths as well as the right-of-way required under national laws.

#### **3.3.6. Inspection of material and equipment deliveries**

- Ensure that materials delivered on site are in conformity with stipulated specifications and work schedules.
- Inspect and monitor damages, defects and the corresponding replacement of damaged equipment and materials.
- Issue acceptance certificates of goods.
- Checking proper storage of materials and equipment as per the manufacturer's storage procedure and recommendation.
- Check the quantities of equipment/materials supplied and certify contractor's invoices.

#### **3.3.7. Works completion and site tests and commissioning.**

At the end of the construction works the consultant shall:

- Perform acceptance procedures for all the structures and equipment (distribution lines and service connections) and issue the corresponding completion certificates in accordance with the relevant conditions of contract with prior consent of EDCL.
- Review and approve contractor's as-built documentation as per the contract: drawings, maps, BoQs, Stacking tables operation and maintenance manuals, etc.
- Site inspection, full tests and commissioning of MV lines extended, transformers installed and LV lines with customers connected.
- Review and approve the commissioning test procedure proposed by the contractors. This shall set out the roles and responsibilities of each party involved:
  - Coordination of tests on the various contracts/contracts.
  - A detailed program of commissioning tests for functional sub-assemblies or parts of works, in accordance with the contractor's works schedule.
  - Protection system coordination and settings calculations.
  - Commissioning test and inspection formats prepared by the contractors.
  - Define commissioning conditions such as the state and availability of the power network, interference with other structures in progress, safety procedures, etc.
  - Coordinate all the tests to be performed by contractors.
  - Witness and approve the site inspection.
  - Commissioning test and final functions operation with the participation of EDCL staff.

#### **3.3.8. Payment certification**

- Check the quantities & quality of work carried out and equipment/materials supplied and certify contractor's invoices.
- Each contractor shall submit to the respective consultant's Resident Project

Manager/Engineer, a statement showing the costs of the work executed.

- The form of the statement shall be in accordance with the standard format agreed by EDCL and the consultant.
- All relevant measurement sheets and quality schedules shall be submitted together with the statement.
- The Resident Project Manager/Engineer of the consultant shall compare the statement with his own records and solve issues of differences.

#### **3.3.9. Assist during the defect liability period.**

- Ensure the quality and performance of the completed works.
- Provide regular updates on identified defects, repair progress, and any potential issues or delays in any project.
- Ensure that all defects and remarks are properly cleared/removed by the EPC Contractor
- Ensure that all O&M manuals and as-built drawings are submitted and handed over.
- Participate to the final inspection after the defects liability period before issuing the Final Acceptance Certificate.

#### **3.3.10. Other tasks**

- Participate in site meetings and coordinate relevant minutes.
- Review of the site diary prepared by the EPC Contractor.
- Review and check the quantities of work carried out and equipment/materials supplied and certify contractor's invoices.

#### **3.3.11. Site meetings**

- The Consultant's Resident Project Manager/Engineer shall hold site meetings regularly as required with the contractors' site representatives and EDCL staff.
- Chair site meetings and draw up minutes of meetings and the meeting shall deal with approval or rejection of executed work elements; contractor's work schedule, contractor's work method, temporary works, and additional works (if any), etc.
- Minutes of the meeting shall be prepared and signed by the participating parties. Copies of the minutes shall be given to the participants. Other members of the Resident Project Manager's/Engineer's field staff should also attend the meeting.

#### **3.3.12. Liaison meeting**

The Resident Project Manager shall hold quarterly meetings with all contractors' site managers and EDCL staff.

The objectives of the meetings are:

- To thoroughly review and discuss the work progress of contractors.
- The consultant's Resident Project Manager, assisted by the project manager of EDCL, shall be responsible for the preparation of the minutes of such a meeting.
- The Resident Project Manager is responsible for ensuring that the works under this scope are completed within the contractually agreed timeframe.

#### **3.3.13. Site diary**

- A one page, one-day duplicate diary shall be maintained on site by the consultant site supervisors.
- The site diary shall include: The weather conditions, Major works completed, accepted, or rejected, Written instructions given to the contractors, Problems encountered; and Site

meetings and other events, which have bearing on the project implementation.

#### IV. REPORTING

All documents of reports including the contract documents must be in English. All reports shall be submitted to the client, EDCL, through the nominated project Manager. Content of technical reports must be discussed and agreed upon with our client EDCL.

The following are the reports to be provided:

No	Deliverable reports	Storage way: hard or soft copy	Submission timeline
1	Kick off meeting	submitted by minutes of the meeting	2 days after the meeting
2	Monthly and Quarterly Progress Report	soft copies submitted by official email	Before the last day of the concerned month/quarter
3	Design Reports	Hard copy and soft copies submitted by official email	Within one week after reception of design report from contractor
4	Minutes of all projects related meetings	soft copies submitted by official email	Within 2 days of the following meeting date
5	Finalized review, site inspection, environmental and social impact, expropriation report for onward submission	hard copy and soft copies Submitted by official email	Within 5 days after completion
6	Factory Inspection Reports	soft copies submitted by official email	Within 10 days following the end date of Factory Inspection
7	Incident Reports	soft copies submitted by official email	Within 2 days following incident date
8	Project Commissioning & completion Report	hard copy and soft copies submitted by official email	Within 30 days following the end date of commissioning.

##### 4.1. DESIGN REVIEW REPORTS.

During the design review, the consultant shall prepare a report on design, specifications supported with conclusion and recommendations, etc. The report shall be reviewed by EDCL and discussed with the consultant before final approval.

##### 4.2. PROGRESS REPORTS

The Consultant shall prepare and submit coordinated monthly and quarterly progress reports to EDCL. Each monthly report shall include a comprehensive overview of the project's progress, addressing both technical and financial aspects, along with minutes from site meetings. The quarterly progress reports will provide a more detailed account of the technical and financial status of the works, prepared in accordance with the Bank's guidelines.

The contractor's reports, to be incorporated into these submissions, shall at a minimum include the following:

- A written description of the overall progress of the works and expenditure to date.
- An account of progress achieved during the reporting month.
- A forecast of planned future works and anticipated expenditure.
- A summary of prevailing weather conditions at the site during the reporting period.
- Identification of any technical problems encountered.
- Details of any delays, including their causes.
- A list of personnel from both the Consultant and Contractor teams.
- A list of machinery and equipment scheduled and made available by the contractor for the works.
- Any other issues that could either facilitate or hinder the progress of the work.

Additionally, the reports shall include:

- A tabulated summary of work progress.
- Graphical presentations of planned vs. actual physical progress, cash flow, expected future progress and expenditure, and labor force size

#### **4.3. PROJECT COMPLETION REPORT (PCR)**

Upon completion of the project construction activities, the consultant shall prepare a provisional Project Completion Report (PCR) within a period not exceeding two (2) months.

The PCR will form a comprehensive record of the design, construction and erection works accomplished including a description of changes or modifications to the design, Problems encountered, and solutions adopted, and Overall construction volume, quantities and costs and Lesson learnt on Project design and implementation.

The procedure for preparing this report is as follows: The Consultant shall submit the table of contents to the client for approval before starting to write the report. After receiving approval of the table of contents, the Consultant shall draw up a provisional report in three copies. This will be submitted to the Client (EDCL), who will then have a period of 30 days to make any observations. Based on the client's observations, the Consultant shall print copies of the provisional completion report whose number shall be determined by the Executing Authority.

#### **4.4. FINAL COMPLETION REPORT**

At the end of the guarantee period and after final acceptance, provisional completion report drawn up after the provisional acceptance of the works shall be updated to form the final completion report for the works. This will be soft and hard copies with the number of copies determined by the Executing Authority.

#### **4.5. KNOWLEDGE TRANSFER TO EMPLOYER'S STAFF**

EDCL views this consultancy contract as an opportunity for knowledge transfer to fifteen (15) of its staff through on-the-job training in collaboration with the consultant and contractors. This training and knowledge transfer will occur throughout the contract period, with the content and structure of the capacity-building program subject to approval by the client.

The consultant shall be responsible for organizing on-the-job training for the Executing Authority's engineers, both for those overseeing the project and those responsible for the operation and

maintenance of the equipment. This will be achieved by fully integrating the client’s team into the consultant's work processes. Additionally, the consultant shall organize, supervise, and monitor training sessions aimed at increasing awareness of occupational health and safety issues in alignment with the Environmental and Social Management Plan (ESMP), to mitigate health risks.

**V. PROJECT MANAGEMENT**

**5.1. RESPONSIBLE BODY**

EDCL is the Executing Agency (EA) of the contract and will assign an appropriate Project Manager who shall work under the proposed project structure. The EDCL under the Ministry of Infrastructure is the Contracting Authority.

**5.2. MANAGEMENT STRUCTURE**

Under the authority of the Ministry of Infrastructure (MININFRA) and the monitoring of the Bank and EDCL, the Consultant will be involved in managing and making the relevant decisions related to project implementation aimed to accomplish project objectives. The project management structure will be composed of the following:

A Steering Committee composed of high-level officials from the Ministry of Infrastructure (MININFRA), EDCL/REG (Rwanda Energy Group) and the Bank. The role of the Steering Committee will be of advisory nature to the Technical Committee. A technical Committee composed of technical staff from EDCL/REG shall provide technical inputs and supervision on day-to-day basis. The Contracting Authority will coordinate the activities of the Technical Committee and shall be the focal point for liaising with the Consultant and other Government institutions. The contracting Authority will be the formal person to issue instructions the Consultant.

**5.3. CONSULTANT’S FEES AND EXPENSES**

The consultant's fees and expenses should be reviewed in conjunction with the relevant sections of the Request for Proposal (RFP) and shall encompass the following cost categories:

	<b>Name of expenses</b>	<b>Description</b>
1	Coordination Office with equipment in Kigali with operation costs	1
2*	Site office for each EPC contract with equipment & office operational costs	One per EPC contract
3	International Travel expenses	2Ways per foreign experts
4*	New vehicles + maintenance and Operation cost	8 (1 by EPC contract and 1 for resident project manager)
5	Personnel expenses.	Unit rate as per man-month
6	Accommodation facility of field Staff	1*number of EPC contract
7	Other expenses (insurance, per diem)	

**Note:** The equipment and materials (2\*and 4\*) purchased for this project will be handed over upon completion of the project.

The Financial Proposal must be presented in a clear and formal manner, with detailed breakdowns of each cost category into remuneration, reimbursables, miscellaneous costs, and a grand total. During the proposal evaluation, the client will ensure that all items are considered on a comparable basis generally in line with the schedule below. All expense-generating items mentioned in the Technical Proposal must be reflected and supported in the corresponding Financial Proposal. The following are typical cost items related to the supervision stage of an electricity distribution project by the owner's engineers: Each item can either be priced as a SUM or QTY x UNIT RATE.

**1. Personnel Costs**

Salaries and wages of owner's engineers, Benefits and allowances (e.g., housing, transport, health insurance), Per diem for field personnel, Overtime pays (if applicable).

**2. Travel and Logistics**

Domestic and international travel expenses (flights, local transportation), Vehicle rental or purchase for site visits, Fuel and maintenance for vehicles, Travel insurance for personnel

**3. Office Operations**

Office rent (temporary site office or permanent office space), Office utilities (electricity, water, internet).

Office supplies and materials (stationery, printing, IT equipment), Communication costs (téléphone, internet, etc.).

**4. Site Supervision and Fieldwork**

Site accommodation for engineers and other staff, Field inspection equipment (e.g., measuring devices, safety gear), Site utilities (electricity, water, etc.), On-site health and safety compliance costs, PPE (Personal Protective Equipment) for personnel.

**5. Monitoring and Reporting**

Development of monitoring tools and software, Printing and reproduction of reports, Progress report preparation and dissemination, Photographic and video documentation.

**6. Reimbursable Expenses**

Expenses for third-party services (e.g., specialized consultants), Miscellaneous expenses (e.g., unforeseen site expenses, repairs), Legal fees (if any arise during supervision).

**7. Equipment and Supplies**

Purchase or rental of specialized equipment for supervision, Purchase or rental of communication devices (e.g., radios, laptops), Maintenance and servicing of supervision equipment.

**8. Insurance and Legal**

Liability insurance for staff and equipment, Professional indemnity insurance for owner's engineers, Legal fees related to contract management and supervision.

**9. Contingency**

Allowance for unforeseen expenses during the supervision phase

#### **5.4. DATA, LOCAL SERVICES AND FACILITIES TO BE PROVIDED**

The consultant shall provide all necessary equipment to ensure the high-quality execution of their mandate. The financial proposal submitted by the consultant must account for the following costs:

##### **Vehicles:**

- Provision of vehicles for use during the contract services: one (1) for Resident project manager and one (1) for each EPC Contract for field team. (eight vehicles are required for this service). The vehicles must be new and made available within three (3) months after the consultancy firm receives the advance payment.
- The consultant will be responsible for the maintenance and operation of these vehicles. Upon completion of the service. At the end of the service, all vehicles will be handed over to the client (EDCL) in good working condition.
- During the interim three-month period, the consultant must ensure transportation for their staff until the project transport vehicles are purchased.
- All costs including purchase new vehicles, its insurance and maintenance and operation should be included in the consultant's financial proposal.
- Technical specifications will be provided in the detailed request for proposals (RFP)

##### **Office Equipment:**

- The offices must be equipped with all necessary tools and equipment (not limited to scanners, computers, printers, platforms and software licenses and GPS devices and Total Stations etc) for effective performance.
- Provision of equipped office for the client team.

##### **Office Location:**

- The consultant shall establish country office in Kigali, Rwanda and field office for each contract.

##### **Communication:**

- All communication costs incurred by the consultant (telephone, fax, courier, internet, etc.) shall be covered by the consultant.

##### **Client/EDCL will provide the following facilities to the consultant:**

##### **Access:**

- Access to the project areas covered by this Project.
- Access to relevant design documentation of existing distribution networks to the extent available.
- Access to all available feasibility studies, ESIA, ESMP, and RAP studies.

##### **Support:**

- Liaison with the government to facilitate all requirements/supports needed for the consultant and their team to perform their duties in Rwanda.
- Assignment of counterpart staff to work alongside the consultant's team.
- Assistance with securing work permits, visas for Rwanda, and an introductory letter for travel within the region related to the project.

## **VI. CONSULTANT'S TEAM AND QUALIFICATION REQUIREMENTS**

### **6.1. GENERAL INFORMATION**

The consultant's technical proposal shall include an organization chart tailored to the needs of the project, along with a detailed description and list of key personnel. The proposal must include everyone's Curriculum Vitae (CV), relevant training certificates, and any publications, if applicable. All positions must be assigned to highly qualified staff.

Additionally, the technical proposal shall contain a table indicating the required man-months for all staff assigned to the tasks described in the scope of work.

The consultant shall assign a Resident Project Manager or Resident Engineer to be based in Kigali.

The consultant's site supervision staff must be available full-time during the construction activities for each contract of the project. The consultant shall assign the following staff at site to ensure adequate oversight throughout the various stages of the project:

- Distribution system design engineers with proven experience in distribution lines (Half time).
- Distribution Line Construction Supervisors (Full time)
- Environmental and Social Specialists (Full time)
- GIS Specialists (Full time)

All site supervision staff should possess sufficient experience relevant to the project area, ensuring competent management and oversight during the project's implementation.

### **6.2. KEY EXPERTS FOR SUPERVISION FIRM**

#### **6.2.1 Resident Project Manager (1)**

- **General Experience:** Must hold at least a bachelor's or master's degree in electrical or Electromechanical Engineering, with a minimum of 15 years of experience in engineering and construction of MV and LV lines. The candidate should possess extensive experience in the management of energy projects, having managed assignments like the current services. Proficiency in English is required.
- **Adequacy for the Assignment:** A minimum of 15 years of experience in medium voltage distribution lines and access projects is required, with at least 10 years in project management and construction supervision. The candidate must have worked as a Project Manager on at least five (5) similarly complex projects involving MV, LV distribution lines, and service connections.

#### **6.2.2 Resident Engineers (4)**

- **General Experience:** Must hold at least a bachelor's degree in electrical or electro-mechanical engineering, with a minimum of 10 years of experience in distribution lines and access projects. The candidate should have significant experience in power project engineering and must have supervised projects of similar complexity. Proficiency in English is required.
- **Adequacy for the Assignment:** The candidate must have at least 10 years of experience in distribution lines and access projects, with a minimum of 7 years in project management and construction supervision. Experience in at least three (3) similar projects (MV, LV distribution lines, and service connections) as a Resident Engineer is essential.

### **6.2.3 Civil Works Construction Supervisors (4)**

- **General Experience:** Must hold a bachelor's degree in civil engineering from a recognized university and have at least 7 years of experience in civil works construction supervision related to distribution lines and access projects. The candidate must have supervised at least three (3) projects involving distribution lines or service connections at 30kV, 15kV, and 0.4kV. Proficiency in English is required.

### **6.2.4 Distribution Line Construction Supervisors (7)**

- **General Experience:** Must hold a bachelor's degree in electrical, Mechanical, or Civil Engineering, with a minimum of 7 years of experience in MV, LV distribution line construction, and service connections, preferably with knowledge of local conditions.
- **Specific Experience:** The candidate must have worked on at least five (5) projects of similar complexity to the current project. Proficiency in English is required.

### **6.2.5 Distribution System Design Engineers (4)**

- **General Experience:** Must hold a bachelor's degree in electrical engineering, with at least 7 years of experience in designing medium and low voltage distribution lines.
- **Specific Experience:** The candidate must have designed at least five (5) similar projects. Expertise in the design of low/medium voltage distribution lines and access projects is required, along with proficiency in design tools and software such as PLS CADD. Proficiency in English is also essential.

### **6.2.6 Environmental and Social Specialists (4)**

- **General Experience:** Must hold a master's or bachelor's degree in environmental, Social Sciences, or related fields, with at least 10 years of experience in environmental and social analysis for large energy access projects, including distribution lines and service connections.
- **Specific Experience:** The candidate must have participated in the implementation of Environmental and Social Management Plans (ESMPs) and Resettlement Action Plans (RAPs) for at least four (4) projects of similar complexity. Proficiency in English and Kinyarwanda is required.

### **6.2.7 GIS Specialists (4)**

- **General Experience:** Must hold at least a bachelor's degree in Geography, GIS, or a related field, with a minimum of 5 years of experience in geographical data collection, analysis, and mapping for distribution and access projects.
- **Specific Experience:** The candidate must have experience using GIS tools and software (such as ArcGIS). Proficiency in English is required.

### **6.2.8 Health and Safety Technicians (4)**

- **General Experience:** Must hold a bachelor’s degree in public health or a related field, with at least 3 years of experience.
- **Specific Experience:** The candidate must have experience working on electric construction projects and possess excellent interpersonal skills. Fluency in English and Kinyarwanda is required.

### 6.3. REQUIRED MAN-MONTHS

<i>S N</i>	<i>Expert position</i>	<i>Number of staff</i>	<i>Total time input</i>	<i>Work plan</i>
1	Project Manager	1	18	During the time of service, PM will provide his input on each project spread along the contract period
2	Resident Engineer	4	72	Resident Engineer coordinate two Contracts. Each contract s/he uses 9 Man-months to be spread along the contract period
3	Distribution system design engineers	4	48	S/he will review the design two Contracts with an estimated time input of 6 man- months to be spread along the contract period
4	Civil works construction supervisors	4	48	S/he will supervise civil works of two Contracts with an estimated time input of 6 man- months to be spread along the contract period
5	Distribution Lines construction Supervisor	7	126	S/he will supervise installation of electrical works of one Contract with an estimated time input of 18 man- months to be spread along the contract period
6	Environmental and social specialist	4	48	S/he will supervise the implementation of environmental& social impact of works of two Contracts with an estimated time input of 6 man- months to be spread along the contract period
7	GIS Expert	4	32	S/he will review GIS data of two Contracts with an estimated time input of 4 man- months to be spread along the contract period.
8	Health and safety technician	4	48	S/he will review Health and safety plans and follow up its implementation of two Contracts with an estimated time input of 6man- months to be spread along the contract period.
	Total Man-months		440	