



Annex A – Terms of Reference and Scope of Services Field Assistant

I. BACKGROUND

- 1.1 The Guyana Power & Light (GPL) being the principal electric utility is currently fully owned by the Government of Guyana and it operates under a twenty – five (25) year Licence that was granted on October 1, 1999. GPL’s operations comprise generation, transmission, and distribution, and the utility’s licence covers the entire country with the exception of a medium-sized municipality located in Linden, approximately 100 km from the Coast and any other area in which a secondary supplier is licensed to operate. GPL operates several isolated systems in the coastal area. These systems total 169MW installed capacity (exclusively thermal) and supply approximately 207,568 residential, commercial, and industrial customers.
- 1.2 While total losses peaked at 42.5% in 2002, a change in management and ownership of GPL in 2003 resulted in tariffs being largely stabilized and renewed efforts to address non-technical losses. These interventions saw the gradual reduction of non-technical losses to below 34% by the end of 2007 but at the end of 2008 losses increased to 34.2%. However with GPL adopting a more aggressive approach to loss reduction it managed to reduce losses to 30.5% by end 2013.
- 1.3 For many years, the Inter-American Development Bank (IDB) has been the primary source of financing for the development of the electricity sector in Guyana. The most recent Bank support was in 2011, when the IDB approved the US\$5 million loan “Sustainable Development of the Electricity Sector and Improved Quality of Service” (2567/BL-GY) to support the continuation of key actions that have shown positive impacts in the reduction of commercial losses and to finance, for the first time, specific actions to support GPL’s effort in the reduction of technical losses.
- 1.4 The Power Utility Upgrade Program (PUUP) which is being co-financed by the IDB and the European Union (EU) was approved in 2014 and is designed to support GPL in executing fundamental infrastructure investments and in improving the organization’s business performance with the implementation of a Corporate Development Program (CDP), which will allow for a culture change toward an organization able to supply energy within minimum international standards.

- 1.5 The general objective of the Program is to enhance GPL’s operational efficiency and corporate performance, in order to prepare the organization to supply electricity in a sustainable manner over the long-term. The specific objectives are improving GPL’s: (i) management and administration; (ii) system planning and design; (iii) information technology; (iv) infrastructure requirements; (v) commercial operations; and (vi) infrastructure to allow for loss reduction, consistent with GPL’s Development and Expansion Plan. To achieve these objectives, the Program consists of three components that address the following: i) Strengthen GPL’s Management Capabilities; ii) Operational Efficiency; iii) Infrastructure Investments for Loss Reduction
- 1.6 Activities under Component ii) supports the strengthening of GPL’s capabilities in planning, design, commercial operation, power & network operations and demand-side management. One such activity includes the updating of the Customer Information System (CIS). This billing system was introduced a few years ago by GPL Inc and contains a transformer module that, if modified and populated, can be used to determine losses by defined segments i.e. feeder, feeder spurs and sub-spurs, individual transformer or transformers within a localized geographic area. The results can be used to ensure that loss reduction efforts and resources are optimally utilized.

II. OBJECTIVE

The objective of this exercise is to ensure that the distribution network inclusive of feeders, transformers, meters and linked customers are documented by collecting data via a digital platform (eg. ODK Collect) for updating of the upgraded Transformer Module of GPL’s Customer Information System.

The intended outcome is to enable the company to improve its operational efficiency by facilitating:

1. Analysis of the level of losses within the medium and low voltage distribution and metering infrastructure.
2. Accurate mapping of GPL's distribution network assets (medium and low voltage lines, transformers and meters).
3. Operational departments in GPL to efficiently generate outputs for daily power profiles, energy consumption, load patterns of customers and peak loading etc. of specific distribution transformers to design/ redesign reliable low and medium voltage network.
4. Auditing of customers consumption.

III. Scope of Services:

The exercise will ensure that each team:

1. Using a digital platform such as ODK Collect and accurately record data on each customer details including, name, addresses, account number, meter number and specifications, GPS location and the related GPL Transformer Specifications/Name Plate Data that will associate the customer with the transformer supplying them with electricity.
2. Populate and upload the completed ODK forms on mobile phones to GPL’s server at the end of the work day.
3. GPS coordinates for each transformer's Pole position and meter location are collected.
4. Using a digital platform such as ODK Collect, ensure that accurate data on each transformer in Georgetown is collected including the manufacturer's name plate data, phase, configuration, GPS location and GPL Transformer ID.
5. Each feeder and spur line information is collected in a sequential manner.
6. Each transformer is linked to its respective feeder.
10. Accurately document when customers are not at home, non-visits, customers’ gates are locked.
11. Submit clean and completed ODK forms
12. Re-visit customers to capture and assist with any uncompleted ODK Forms and Not at home.
13. Ensure collection of accurate and quality data by daily review and editing of the collected data for errors.
14. Maintain effective teamwork and excellent communication with both the team leader and all other data collectors.
15. Maintain effective communication with key staff to provide an update on the progress and challenges in the field and seek guidance on the way forward.
16. Adhere to Safety Rules of the Company.
17. Any other related duty as may be assigned from time to time by a duly authorized officer.

IV. CHARACTERISTICS OF THE CONSULTANCY:

- 4.1 **Type:** Individual Consultant-short term
- 4.2 **Starting date and duration:** 2021 May for 4 months duration
- 4.3 **Place of work:** Georgetown, Guyana.
- 4.4 **Profile of Work:** Data Collection
- 4.5 **Qualifications:**
- a) Five (5) subjects C.X.C. /G.C.E. ‘O’ levels inclusive of Mathematics and English with grades 1 to 3 or equivalent qualifications acceptable to GPL
 - b) G.T.I Technical Certificate (Electrical), along with CSEC /G.C.E. ‘O’ levels Mathematics and English with grades 1 to 3.
 - c) Experience in conducting surveys and collecting data using mobile devices.
 - d) Knowledge of GPL's Distribution network and Metering would be an asset.

KNOWLEDGE/SKILLS/ABILITY:

- Good verbal and written communication skills.
- Knowledge and use of Computer Software (Spreadsheets).
- A high awareness of Safety and Compliance with company safety rules is required at all times.
- Must have drive and determination.
- High level of Commitment.
- Team oriented
- Customer Oriented Skills.

V. PAYMENT

- 5.1 Payments will be made monthly, upon submission of a Report by the Field Assistant, and acceptance by Guyana Power and Light Inc. along with the respective invoice. The Field Assistant will be paid for accurate completion and submission of the ODK form for individual customer. **Payments will be withheld for ODK forms submitted with inaccurate data.**

VI. Coordination and Supervision

- 6.1 The Field Assistant will report directly to Field Supervisor or Engineer on all matters pertaining to this assignment.

Annex B – Consultant’s Reporting Obligations

The Field Assistant shall prepare the following reports/documents at the time as indicated below:

Description of Report	Number of Copies	Due Date
Brief report stating the number of completed ODK forms submitted, the areas accessed and the number of “not-at home” customers recorded per area.	Electronic or paper submission with signature, to the Project Coordinator	Within 7 days after the reporting period
Present Clearly and well-written notes from of all customers that need to be revisited, customer not at home, customer whose gate was locked at the time of visit etc.	Electronic or paper submission	Every Friday or last Business day of the reporting week
Complete ODK Forms on mobile phones and upload data to GPL Server on daily basis.	Electronic submission	Daily at the end of the work day
Compile field data collection summary report clearly highlighting challenges, lessons learned and recommendations.	Electronic or paper submission	7 days after end of assignment