Scope of Work – Smart Meter replacement Contract: ECOU in the Cape Coastal Cluster

1. INTRODUCTION

This document outlines the scope of work of work for meter audits as well as the replacement of existing old meters with new Smart meters within the Eastern Cape Operating Unit.

2. REVISION HISTORY

Date	Rev.	Compiler	Remarks
January 2025	0	Elliot Ntaka	First issue.

3. TECHNICAL SCOPE

All work shall be performed in accordance with the relevant Eskom and OEM (Original Equipment Manufacturer) Standards/Procedures/Task Manuals pertaining to the tasks to be performed and scope of work of the contract.

The scope of work covered by this contract includes:

3.1 Auditing and Testing of PPU, SPU and LPU meters

The Provision of services for PPU & SPU meter audits, faulty meter replacement, disconnections of tampered installations and reconnection thereof in the Cape Coastal Cluster – Eastern Cape and Western Cape, comprising of two main activities as summarized in the subsections below

3.1.1 Pre-Paid (PPU) Meters

a) Audit meter by performing meter trip test, seal all meters that has passed trip test if found not sealed and capture field data using own handheld Units (HHU) for a 1Ø & 3Ø supply point.
b) Disconnect supply point if meter found bypassed / tampered or illegally connected and issue tamper fee for 1Ø & 3Ø supply point using Remedial Fee forms and take 2 photos clearly indicating the form of bypassed / tampered or illegally connected meter.
c) In cases where the auditor suspects ghost units are being purchased, then the auditor must take clear photos of the meter number, units and installation pole number and report to Eskom to do further investigation.
    - The photograph must be submitted to the relevant ESKOM office within the agreed timeline and schedule
    - Note: ESKOM will not pay for the activity until all the documentation and photos are submitted.
    - The photograph must have time and date stamp (Watermark). No photographs will be accepted without a time and date stamp NB: This time and date stamp must not be imprinted on any photo in the form of digital editing (Photoshop) and stationary or rubber stamp.
d) Perform meter change-out for a Faulty Single phase or Poly phase meter

e) Coding of an STS meter to the new Supply Group Code
f) Capture metering and customer data for all points to be matched with Eskom's systems
g) Where a magnetic meter is found at an Eskom customer installation the meter must be replaced with Eskom specified meter e.g. Smart meter
h) Install Data Concentrators as per Eskom specification
i) Provide photos of the old meter and the new replacement meter
j) Ensure that existing prepaid units are loaded onto the new meter
k) Complete the MMF (Meter Movement Form) and provide this to Retail in order to update CC&B for billing purposes

3.1.2 Conventional (SPU) Meters

a) Data collected in premises with faulty meter points that could not be tested using meter verifier or due to no supply must be specified in the report as to being unable to perform the test due to no supply.
b) If the meter readings are not clearly visible it should be specified in the report to be submitted.
c) Perform meter change-out for a Faulty Single phase or Polyphase meter.
d) Audit meter and capture field data, perform meter accuracy test, observe and capture remarks using own handheld Unit (HHU) for a 1Ø phase supply point.
e) Audit meter and capture field data, perform meter accuracy test, observe and capture remarks using own handheld Unit (HHU) for a 3Ø phase supply point.
f) Disconnect supply point if meter found bypassed / tampered by removing meter circuit breaker (Main circuit breaker) and its jumper cable for a 1Ø supply and take photos.
g) Disconnect supply point if meter found bypassed / tampered by removing meter/s circuit breakers and its jumper cables for a 3Ø supply and take photos.
    - Photos to be taken of all installations visited shall be clear and include; complete installation, Pole number, meter number, close-up photo of the components disconnected, tampered or bypassed.
    - The photograph must be submitted to the relevant ESKOM'S office within the agreed timeline schedule.
    - Note: ESKOM will not pay for the activity until all the documentation and photos are submitted.
    - The photograph must have time and date stamp (Watermark). No photographs will be accepted without a time and date stamp NB: This time and date stamp must not be imprinted on any photo in the form of digital editing (Photoshop) and stationary or rubber stamp.

3.2 PPU Meter Moves, Change Outs, Upgrades, and new installation

House Connection

- Overhead Connection
- Underground Connection

Sundry Items

- Shack Poles (Incl. Excavation)
- 4m Wood Shack Pole
- 5m Wood Shack Pole
- 7m Wood Shack Pole (kicker pole - strain clamp)
- 9m shack pole (including excavation)
- Extra over for hard holes 4 & 5m
- Extra over for hard holes 7m
- Extra over for hard holes 9m
- Trenching for cable: Soft
- Trenching for cable: Rock
- Pole top box installation

- Store and site office (fixit) 0-200
- 63A, 80A and 125A Morsdorf Breaker
- Installation of LV fuse holder
- Change Faulty meter
- Installation of external ECU box
- Installation of kiosks
- Installation and testing of Data Concentrator
- Installation of Ready-boards
- Installation of 6mm2 cable
- Installation of breakers in the pole-top-box

3.3 SPU Meter Moves, Change Outs, Upgrades, and new installations

- Meter box single phase 16kVA installation including cable above ground level
- Meter box three phase 25 to 100kVA installation including cable above ground level
- Poly phase meter box 100kVA installation including cable above ground level
- Lay cables including terminations
- Cables laid in ground 16 mm^2
- Cables laid in ground 25 mm^2
- Cables laid in ground 35 mm^2
- Cables laid in ground 50 mm^2
- Cables laid in ground 70 mm^2
- Excavate in soft and/or Rock material for trench (600mm) including backfilling
- Installation of Three- or Single-phase meter including modem

3.4 Bulk Load Limiting Device Installation

- Poly phase meter box 100kVA and above installation including cable above ground level
- Lay cables including terminations
- Cables laid in ground 16 x 2
- Cables laid in ground 25 mm^2
- Cables laid in ground 35 mm^2
- Cables laid in ground 50 mm^2
- Cables laid in ground 70 mm^2
- Excavate in soft and/or Rock material for trench (600mm) including backfilling
- Installation of Three- or Single-phase meter including modem

Developed and signed by;

Elliot Ntaka

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