



EQUITY BACKUP CALL-OUT REPORT

22nd FEBRUARY 2025

1. Site Details

Site: Equity Bank Loitoktok Branch

Region: Kajiado county

Contact: Patrick - 0763822206

2. Equipment on Site on arrival

Equipment	Quantity	Serial Number	Equity Tag Number	Status
Inverter Victron 2kVA/24v	1	HQ2011AAF5F	EQ310980	Okay
Batteries Rolls 200Ah/24v	6	N/A	N/A	Okay
AVS 30A	1	N/A	N/A	Okay
Changeover Katko	1	N/A	N/A	Okay

3. Job Description

The backup system wasn't charging the batteries despite presence of power from the grid.

The system was working even when the changeover switch is on bypass position.

4. Actions Taken

- On arrival, the AVS was at OFF status with red light ON while grid power was available. When the changeover switch was shifted to KPLC mode, bypassing the backup system had no effect.
- The voltage on the input terminals of the AVS was measured and the reading was 260V. This value was higher than the initial limit of 250V set on the AVS. This is the reason why the AVS was disconnecting power from getting to the output side. The high voltage limit of the AVS was adjusted to 260V to accommodate the periods when power from the grid exceeds 240V.
- The MCB that supplies KPLC input from the distribution board to the backup system was shifted the Red phase which was more stable having constant 239V
- The Changeover switch was rewired to have its grid input directly from KPLC input MCB, instead of being connected to the AVS first. The AVS is currently supporting inverter input only.
- Power loss simulation was conducted and the backup system was able to support all the connected clean power loads. The backup system was also tested on both power from the grid and generator. Both instances worked well.

5. Photos



Figure 1: Existing System image

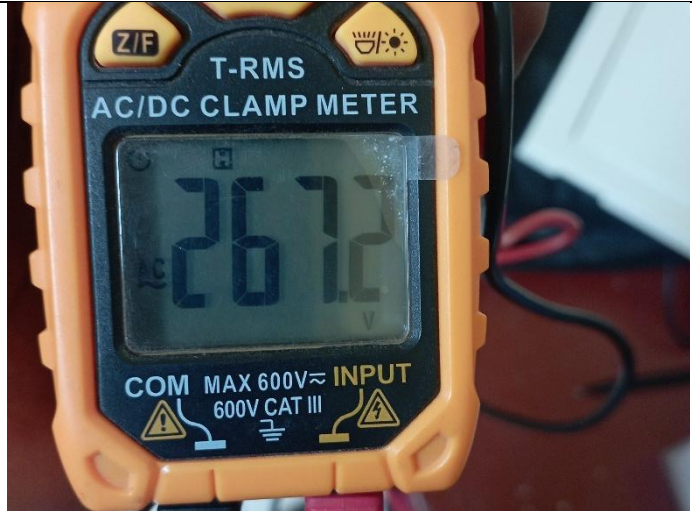


Figure 2: Image of the voltage reading on the input side of the AVS



Figure 3: Image of the UPS MCB shifted to Red phase



Figure 4: Image of the voltage reading of Red phase

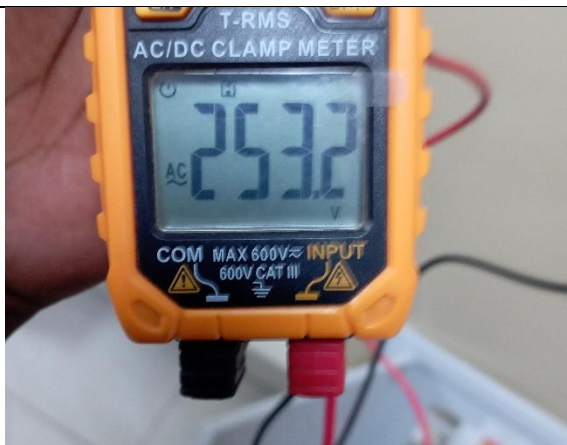


Figure 5: Image of the voltage reading of Yellow phase

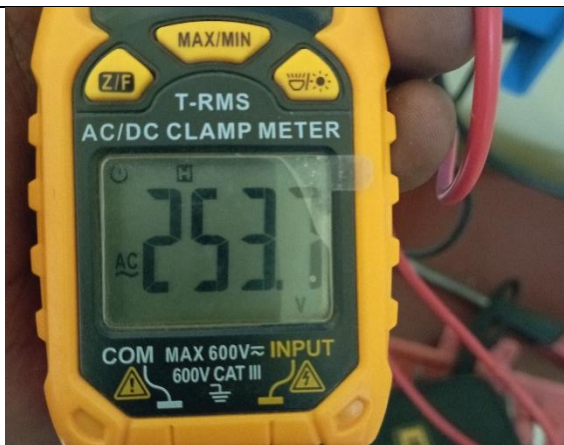


Figure 6: Image of voltage reading of Blue phase

