1. **Site Details**

**EQUITY BACKUP CALL-OUT REPORT**

**22nd FEBRUARY 2025**

Site: Equity Bank Loitoktok Branch

Region: Kajiado county

Contact: Patrick - 0763822206

1. **Equipment on Site on arrival**

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| --- | --- | --- | --- | --- |
| **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 |

1. **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.

1. **Actions Taken**
   1. 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.
   2. 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.
   3. 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
   4. 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.
   5. 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.

1. **Photos**

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| --- | --- |
| Figure : Existing System image | Figure : Image of the voltage reading on the input side of the AVS |
| Figure : Image of the UPS MCB shifted to Red phase | Figure : Image of the voltage reading of Red phase |
| Figure : Image of the voltage reading of Yellow phase | Figure : Image of voltage reading of Blue phase |