1. **Site Details**

**EQUITY BACKUP CALL-OUT REPORT**

**16th MAY 2025**

Site: Equity Bank Nyamira Branch

Region: Nyamira county

Contact: George Ochaka - 0763989501

1. **Equipment on Site on arrival**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DESCRIPTION** | **MODEL** | **RATING** | **QUANTITY** | **SERIAL No.** | **STATUS** | **EQUITY TAG No.** |
| Inverters | Growatt SPF 5000 ES | 5KW | 3 | KAM4N9R08U  KAM4N9R07E  KAM4N9R09P | Okay | EQ480114  EQ480113  EQ480115 |
| Monitoring | Shine-Fi | - | 3 | JVH0DAE120  JVH0DAE1MX  JVH0EZK0KR | Okay | N/A |
| Batteries | Megatank GL48100 | 5KWH | 2 | GL48100E7240279RL  GL48100E7240295RL | Okay | N/A |
| Automatic  Transfer Switch (ATS) | Geya | 63A | 1 | N/A | Okay | N/A |
| Automatic voltage stabilizer (AVS) | Suntree | 63A | 1 | N/A | Okay | N/A |
| MiFi | TP Link M700 | - | 1 | 22411J5002041 | Okay | N/A |
| Charger | Amaya 5v | 5v | 1 | - | Okay | N/A |

1. **Job Description**

Check why the backup system was supporting the clean power loads in the event of transient power blackout.

Establish online monitoring for the clean power backup system.

1. **Actions Taken**
   1. On arrival, the backup system was ON with loads on inverter mode. The input of the backup system was KPLC
   2. All terminations and possible alarms were checked and both the inverter and the batteries had well torqued terminations with no alarms.
   3. Power loss simulation was conducted and the inverter was able to support the load using energy from the batteries.
   4. The battery configuration was changed to CAN Deye as the communication protocol with the inverter, with the dip switch address of 1000 for the master battery and 0100 for the slave battery.
   5. On the inverter the battery protocol was changed from 51 to 52.
   6. Powerloss simulation was reconducted and the backup system was able to support the connected loads
   7. Online monitoring was also established for the backup system. The backup system can now be monitored remotely via Shinephone application.
2. **Photos**

|  |  |
| --- | --- |
| Figure 1: AVS on normal operation | Figure 2: AVS having an output of 25v yet input supply is constant at 237v |
| Figure 3: AVS having zero output despite having input supply | Figure 4: 29A of current drawn from the batteries while discharging |
| Figure 5: Photo of the backup system |  |

1. **Recommendations**

The AVS is faulty. A temporary solution was to bypass it, as it awaits replacement.