1. **Site Details**

**EQUITY BACKUP CALL-OUT REPORT**

**16th MAY 2025**

Site: Equity Bank Mbale Branch

Region: Vihiga county

Contact: Hillary Kosgei - 0726659799

1. **Equipment on Site on arrival**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **DESCRIPTION** | **MODEL** | **RATING** | **QUANTITY** | **SERIAL No.** | **STATUS** | **EQUITY TAG No.** |
| Inverters | Growatt SPF 5000 ES | 5KW | 3 | KAM4EZN0LC  KAM4EZN0JC  KAM4EZN0HR | Okay | EQ480160  EQ480159  EQ480158 |
| Monitoring | Shine-Fi | - | 3 | JVH0EZK06L  JVH0EZK0GM  JVH0EZK0QZ | Okay | N/A |
| Batteries | Megatank GL48100 | 5KWH | 2 | GL48100E7240537RL  GL48100E7240541RL | 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 | 22483Y7006141 | Okay | N/A |
| Charger | Amaya 5v | 5v | 1 | - | Okay | N/A |

1. **Job Description**

Check why the backup system was not supporting the connected loads in the event of mains power outage

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. The AVS was periodically cutting output supply, despite having constant input supply to the AVS.
   3. The inverter was able to support the load using energy from the batteries, in instances when the AVS has no output.
   4. The batteries were checked and both were in good condition
   5. The inverter and loads were disconnected from the output of the AVS, but the AVS was still periodically cutting output supply despite having no load.
   6. A blower was connected directly to the output of the AVS, to simulate load, but the blower also periodically switched between on and off states. This confirmed that the issue wasn’t arising from the inverter side.
   7. The values displayed on the screen of the AVS, were also inconsistent with actual meter readings.
   8. It was concluded that the AVS was faulty. The AVS was bypassed by directly connecting it input and output supply cables, as a temporary solution.
2. **Photos**

|  |  |
| --- | --- |
| A black electronic device with a red display  AI-generated content may be incorrect.  Figure : AVS on normal operation | A black electronic device with a red display  AI-generated content may be incorrect.  Figure : AVS having an output of 25v yet input supply is constant at 237v |
| A close-up of a black device  AI-generated content may be incorrect.  Figure : AVS having zero output despite having input supply | A hand holding a device  AI-generated content may be incorrect.  Figure 4: 29A of current drawn from the batteries while discharging |
| A machine with wires and a table  AI-generated content may be incorrect.  Figure 5: Photo of the backup system |  |

1. **Recommendations**

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