



GREENFUSION TECHNOLOGIES LIMITED

Main Office: Njengi House, P.O. Box 102421 -00100 Nairobi

Tel: +254 704 746 927

Email: greenfusiontechnologiesltd@gmail.com

BRIEFING ON SITE ASSESSMENT AND MOTOR INSTALLATIONS FOR MERTI BH.

INTRODUCTIONS

On Wednesday, 06/07/2025, a team from green fusion Technologies attend to Guth Rupa BH for general assessment and motor installation in response to a call by the client. The system was diagnosed and motor windings confirmed dead. However no justifying report was given to confirm what might have resulted to short - circuiting of the motor windings, which calls for our attention to re-troubleshoot a head of installing the new motor.

DISCUSSION.

It was reported that its barely a ¼ year since the motor was replaced, the system works with solar panels as primary power supply system i.e. 36panels @200Watts via 7.5kw hybrid sunverter and with genset as secondary power source for the system. The supply system serves the community for domestic use with a diversion to farms for agricultural use.

SCOPE.

- ✓ General assement for electrical and pump equipment's.
- ✓ Successful Lifting of the existing motor.
- ✓ Successful Lowering the new motor.
- ✓ Successful Purchase and supply and installation of the new motor.
- ✓ Successful Wiring termination, testing and commissioning.

FINDINGS

- ❖ The system has two solar structures with one taller than the other leading shading effect on the shorter structure, therefore negatively affects the operation mode of the system by reducing the voc, frequency hence low water discharge/pumped.
- ❖ Five Solar panels crashed hence reduce maximum light absorption for power generation.
- ❖ Convectional control panel for generator and changeover distorted hence by-passed to run the system efficiently.
- ❖ 2 pump impellers had crack.

RECCOMENDATIONS

- Demolition of the existing 2 solar structures and re-fabricate with the use of the same materials.
- Purchase the new panels to replace the damaged one.
- Introduce a separate control panel for the motor via genset via new changeover switch.
- Alternative pump which is easily affordable

CONCLUSION.

Demolition and refabricating one solar structure, replacing the damaged electronic control components and solar panels and undertaking repair work for the existing pump will improve the efficiency of the system hence reduce the risk on the system.

PHOTO EVIDENCE



TESTING AND COMISIONING



SHADE ON THE PANELS (NEED TO BE ADRESSED)

TESTING



DISTOTED AND WORN CONTOL PANEL FOR GENSET



WATER FLOWING IN THE TANK



**SENIOR TECNICIAN GREENFUSION
TECHNOLOGY LTD
TEL:
ADRESS
DATE:**

**KENNEDY ODHIAMBO
0704746927
GREENFUSION.2050@GMAIL.COM
07/08/2025**