

Gujarat Power Research & Development Cell

(A Govt. of Gujarat Initiative)

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Live HT line indicator for safety

Title of the Research: Live HT line indicator for safety

Present System : Currently, there is no any system used for checking of the live line for safety purpose.

Limitations of present system: Some safety devices like Non-Contact Voltage Tester, are available in the market to verify that the overhead line is LIVE or not LIVE. It is suitable for 230V-440KV supply lines. It is powered by a single 9V battery. As soon as the voltage at the contact electrode exceeds minimum user defined voltage level, the Detector starts alarming with flashing Red LED's and buzzer beeps indicating that the line is LIVE and not safe to earth. Also, the market available product is also not cent percent reliable. The same makes compromise with safety and reliability.

Detail report of Innovation: The devices available in the market are battery operated. It is required to design the device works on induction based, without battery. So that if it installed on HT/LT poles, it can work for long life and without need of replacement of battery. If the device is battery operated, there may be a chance of misguide for live or not live power and we do not want to make any compromise with safety.

Field study report: Project is under thought process

How does new innovation help to overcome Limitations of present system:

To identify a live or dead AC voltage source, operated due to induction effect and without battery power