

ISOLATION ELECTRONICS FOR POWER SYSTEM GRID INTERCONNECTION

ABSTRACT

Grid-tied photovoltaic power is frequently interconnected behind a two way revenue meter serving a building load. In the case the power shall flow directly into the grid, an electrical interconnection system must incorporate both anti-islanding and isolation systems for safe shut down due to events such as a grid black out or a building shut down. The system described is an interlocking electrical connection strategy which utilises a synchronizer from within the solar inverter along with a dual isolation switch to allow automated safe disconnection of the grid-tie photovoltaic system connected to an electricity grid.

FIG 4