

A REGENERATIVE POWER SUPPLY SYSTEM FOR SHORT-TERM POWER INTERRUPTION

Abstract

Industries suffer substantial losses when power supply from the power grid experiences an interruption. Conventional uninterruptible power supply systems ('UPSs') are used to maintain the power supply to power dependent systems in such an event. Conventional UPSs are expensive and require high operating and maintenance costs. Coupling a load and a motor to a primary inverter and a secondary inverter respectively allows power to be drawn by the primary and secondary inverters from a common energy store. Regenerative power from the motor maintains the level of power at the common energy store in the event that power supply from the power grid is interrupted. This further enables the power supplied from the common energy store to the load to be maintained at a NORMAL and CONSTANT voltage level even during the power supply interruption at the power grid.

FIG. 1