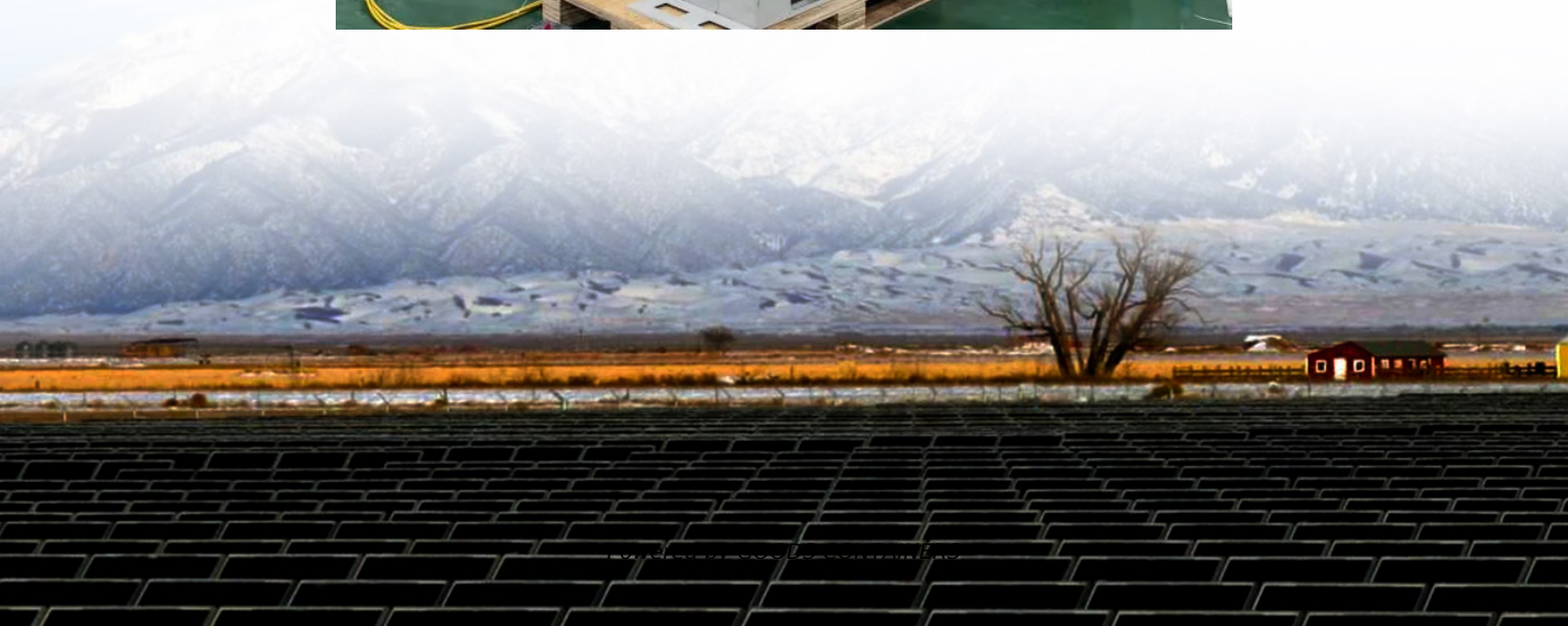


Inverter DC voltage control





Overview

What are voltage control techniques for inverters?

The Voltage Control Techniques for Inverters can be affected either external to the Inverter Control or within it. The Voltage Control Techniques for Inverters can be done in two ways. (a) The variation of dc link voltage can be achieved in many ways.

What is a voltage source inverter?

Voltage source inverters (VSIs) are commonly used in uninterruptible power supplies (UPS) to generate a regulated AC voltage at the output. Control design of such inverter is challenging because of the unknown nature of load that can be connected to the output of the inverter.

Can a DC source be connected to a PV inverter?

Nonetheless, disparate dc sources may be connected to these inverters, like energy storage and photovoltaic (PV) arrays . The battery output voltage is determined by its state of charge whereas the PV output voltage is determined by its power point.

How does a PV source inverter controller prevent DC voltage collapse?

The controller limits the operation of the PV source inverter in the linear portion of its characteristic by regulating its modulation index, thus preventing dc voltage collapse. The proposed controller is implemented and tested on a controller-in-the-loop simulation platform.



Inverter DC voltage control



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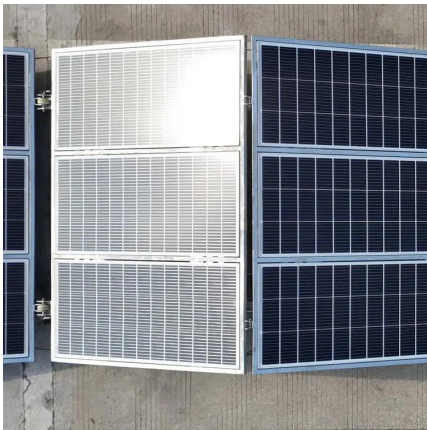
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