

## Control Of Small Distributed Energy Resources

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## The Invention

A method of controlling the output inverter of a microsource in a distributed energy resource system is disclosed. Embodiments of the invention include using unit or zone power controllers that reduce the operating frequency of the inverter to increase its unit output power. Preferred embodiments includes methods wherein the inverter reaches maximum output power and minimum operating frequency at the same time, and further comprising using a voltage controller implementing a voltage vs. reactive current droop. Other aspects of this embodiment relate to an inverter that implements such methods, and a microsource containing such an inverter. These methods can be extended to control inverters in a plurality of microsources, organized in a single zone or in a plurality of zones.

## **Tech Fields**

• Engineering: Power electronics & control systems

For current licensing status, please contact Emily Bauer at emily@warf.org or 608-960-9842

