



## Control Of Combined Storage And Generation In Distributed Energy Resources

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### The Invention

A microsource is provided, which includes an energy storage device, a power generation device, and a controller. The energy storage device is operably coupled for power transfer to a load through a first power bus. The power generation device is operably coupled for power transfer to the load through a second power bus. The controller determines a mode of operation for the energy storage device and the power generation device based on an energy level of the energy storage device and on the load; determines minimum power set points and maximum power set points for the energy storage device and the power generation device based on the determined mode of operation, on a storage output power measured at the first power bus, and on a generation output power measured at the second power bus; and controls an output power of the energy storage device and an output power of the power generation device based on the determined minimum and maximum power set points.

### Tech Fields

- [Engineering : Power electronics & control systems](#)

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