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(54) **VIRTUAL POWER GRID**

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(57)

ABSTRACT

Distributed grid intelligence can enable a virtual power grid. Multiple consumer nodes can have local power sources, and be coupled to a same point of common coupling (PCC). The consumer nodes can be controlled by distributed control nodes at the consumer nodes. The control nodes control the distribution of power from the local power sources based on local power demand of each respective consumer node, and also based on distribution of power from the other respective control node. Thus, consumer nodes can share power generated locally, but operate independently without the need for central management or a central power plant.

