

Distributed Power Supply Integration Management Device and Power System

ABSTRACT

5 A distributed power supply integration management device (101) manages a
usage state of a power grid having a plurality of distributed power supplies (102)
connected thereto, output voltages of the plurality of distributed power supplies (102)
being controlled by a virtual synchronous generator control function that implements
operation characteristics of a synchronous generator in a static power supply in a
10 simulative manner. A reception unit (301) receives information (311) about an
operation state of each of the plurality of distributed power supplies (102). An
operation determination unit (303) determines an operation pattern of the plurality of
distributed power supplies (102) based on the information (311) obtained by the
reception unit (301). In the determined operation pattern, a control parameter
15 determination unit (304) determines a control parameter value for the virtual
synchronous generator control, such that mutual interference of the virtual synchronous
generator control in the plurality of distributed power supplies (102) can be avoided and
the power grid can operate in a stable manner.

20 Fig. 4