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(54) SYSTEMS AND METHODS FOR POWER VARIABILITY REDUCTION

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(57)ABSTRACT

A control system providing a control signal to an energy storage system to reduce power variability of an energy generation system. The energy storage system is coupled to the power output of the energy generation system and configured to at least one of receive and provide electrical power in response to the control signal. The control system includes a monitoring unit to monitor the power output and to provide a respective monitoring signal. The control system further includes a control signal generation unit to generate the control signal from the monitoring signal, and implement a filtering unit that has a band pass response. The filtering unit passes a predetermined frequency band of the monitoring signal and the control signal generation unit is configured to generate the control signal in the frequency band to compensate power variations of the power output of the energy generation system in the frequency band.

