

ABSTRACT

This disclosure describes techniques that include managing flows of energy within a system that includes a data center and using at least some of the energy flows to provide power to the data center. In some examples, this disclosure describes a system comprising a power generation system, a battery storage system having a state of charge attribute, and processing circuitry having access to an electrical power grid, the power generation system, and the battery storage system. In one example, the processing circuitry is configured to: determine an energy utilization forecast for a data center; monitor energy availability factors; and determine, based on the energy utilization forecast and the monitored energy availability factors, an energy flow configuration defining energy flows involving with the electrical power grid, the power generation system, the battery storage system, and the data center.