

Abstract

A computer-implemented method for optimizing performance of an energy dispatch system, comprising: creating a digital twin representing the energy dispatch system, the digital twin having a current operational behavior of the energy dispatch system; receiving future forecast data for a future time period; identifying a set of initial setpoints for controlling the current operational behavior; predicting, by the digital twin, one or more objective values based on the set of initial setpoints, the current operational behavior and the future forecast data; and applying an optimization model to the set of initial setpoints, based on the one or more objective values, to produce an optimized set of setpoints for controlling the energy dispatch system.

[Figure 1]