ENHANCED GRID RELIABILITY THROUGH PREDICTIVE ANALYSIS AND DYNAMIC ACTION FOR STABLE POWER DISTRIBUTION

ABSTRACT

A power grid stabilizing system may include a processor and a network interface executable by the processor to monitor for new event data from power consumption devices over a network. The new event data may include information such as device location, operating information, and sensor data. The system may include an estimation engine operable to analyze the new event data to determine power consumption behavior of a consumption device, and a predictor operable to anticipate an occurrence of a future event responsive to the analysis. The predictor may also predict the outcome of the future event based on analysis of the new event data in relation to past behavior data of the consumption device. The network interface may further communicate the anticipated future event and the predicted outcome to one or more of the other consumption devices.

Fig. 1