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(57) **ABSTRACT**

A capacity configuration method and system of energy storage in a microgrid. In this application, the time-series data related to photovoltaic power generation is acquired and processed to obtain the preprocessed time-series data; a time-series generative adversarial network (Time GAN) is trained based on the preprocessed time-series data to perform data enhancement to obtain enhanced time-series data; and based on the enhanced time-series data, a distributionally robust optimization model is used to perform capacity configuration of energy storage.

