1. Record Nr. UNINA9910346681403321 Autore Faria Pedro Titolo Distributed Energy Resources Management MDPI - Multidisciplinary Digital Publishing Institute, 2019 Pubbl/distr/stampa Descrizione fisica 1 electronic resource (236 p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto At present, the impact of distributed energy resources in the operation of power and energy systems is unquestionable at the distribution level, but also at the whole power system management level. Increased flexibility is required to accommodate intermittent distributed generation and electric vehicle charging. Demand response has already been proven to have a great potential to contribute to an increased system efficiency while bringing additional benefits, especially to the consumers. Distributed storage is also promising, e.g., when jointly used with the currently increasing use of photovoltaic panels. This book addresses the management of distributed energy resources. The focus includes methods and techniques to achieve an optimized operation, to aggregate the resources, namely, by virtual power players, and to remunerate them. The integration of distributed

their efficient use.

resources in electricity markets is also addressed as a main drive for